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From Office Water Supply
July 1902

SIXTIETH ANNUAL REPORT

OF THE

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Board of Public Works,

TO THE

GOVERNOR OF THE STATE OF OHIO,

FOR THE

Year Ending Nov. 15, 1898.

COLUMBUS, O.:
THE WESTBOTE CO., STATE PRINTERS
1899.

SIXTIETH ANNUAL REPORT

OF THE

Board of Public Works,

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COLUMBUS, O.:
THE WESTBOTE CO., STATE PRINTERS.
1899.

OFFICE OF BOARD OF PUBLIC WORKS,

COLUMBUS, December, 1898.

To His Excellency, ASA S. BUSHNELL, Governor of Ohio:

SIR: I have the honor to transmit to you herewith the sixtieth annual report of the Board of Public Works.

E. L. LYBARGER,
President Board of Public Works of Ohio.

SIXTIETH ANNUAL REPORT

OF THE

BOARD OF PUBLIC WORKS.

The sixtieth annual report of the Board of Public Works of Ohio, for the fiscal year ending November 15, 1898, is herewith presented.

As required by law, the Board was reorganized on the second Tuesday of February last, at which time Hon. Chas. A. Goddard, of Scioto county, took his seat as a member of the Board for a term of three years, having been elected at the election in November, 1897. Having given a bond in the sum of $30,000, which was approved by the Governor and filed with the Treasurer of State, he was sworn in and assumed the duties of the office.

Hon. E. L. Lybarger, being the senior member, was, agreeable to a rule of the Board, elected president for the ensuing year.

The following constitute the

MEMBERS OF THE BOARD.

Name.	Residence.	Expiration of term
E. L. Lybarger	Spring Mountain	Second Tuesday in February, 1899
Frank A. Huffman	Delphos	" " " 1900
Chas. A. Goddard	Franklin Furnace	" " " 1901

Hon. Washington G. Johnston, of Summit county, was elected November 8, 1898, to succeed Hon. E. L. Lybarger, whose term of office expires on the second Tuesday of February, 1899.

The public works, divided into three grand divisions, were assigned to the members as acting commissioners respectively, as follows:

To the Hon. E. L. Lybarger—Grand Division No. 1—embracing that portion of the Ohio canal extending from Cleveland to Muskingum Slackwater at Dresden, including the six-mile remnant of the Walhonding canal, nineteen miles of which was abandoned by an act of the General Assembly (see H. B. No. 508, passed April 27, 1896,), making a total of 157 miles.

To Hon. Chas. A. Goddard—Grand Division No. 2—embracing that portion of the Ohio canal extending from Dresden Junction to Portsmouth, including the Columbus feeder, a distance of 169 miles. Also the State's reserved rights in the Hocking canal.

To Hon. Frank A. Huffman—Grand Division No. 3—all of the Miami and Erie canal extending from Cincinnati to Toledo, including the feeders and reservoirs.

OFFICERS BY APPOINTMENT.

Chief engineer, Chas. E. Perkins, Akron; appointed by the Governor; term expires May 22, 1900.

Assistant engineer, Samuel Bachtell, Columbus; appointed by the Board; term expires second Tuesday in February, 1900.

Secretary, Wm. T. McLean, Sidney; appointed by the Board; term expires second Tuesday in February. 1899.

Clerk and stenographer, Miss Rebekah Sullivant, Columbus; appointed by the Board; term expires second Tuesday in February; 1899.

F. W. Schaub, messenger, appointed by the Board; term expires second Tuesday in February, 1899.

SUPERINTENDENTS.

(Terms expire March 31, 1899.)

Name.	Location.	Yearly salary.
Wm. M. Hiltabidle	Akron	$1,400 00
Chas. H. Geidel	Coshocton	1,400 00
*Wm. Hahn	Zanesville	1,400 00
†W. H. Kirkendall	Circleville	1,400 00
Charles T. Hayman	Cincinnati	1,400 00
John O'Connor	Dayton	1,400 00
H. W. Meacham	Toledo	1,400 00

*Wm. Hahn died August 19, 1898. F. C. Dietz, of Zanesville, appointed to fill vacancy September 13, 1898.

†W. H. Kirkendall, resigned March 1, 1898. Geo. H. Watkins, of Wakefield, appointed to fill vacancy.

COLLECTORS MIAMI AND ERIE CANAL.

(Terms expire March 31, 1899.)

Name.	Location.	Yearly salary.
Chas. Wittich	Toledo	$600 00
D. H. Hancock	Napoleon	400 00
H. W. Myers	Defiance	300 00
*Henry E. Fisher	Delphos	250 00
†W. H. Doll	St. Mary's	500 00
Lewis G. Davis	Piqua	500 00
Logan C. Miller	Dayton	600 00
‡C. W. Sutphin, Sr	Middletown	400 00
J. W. Sullivan	Lockland	550 00
W. A. Gregg	Cincinnati	1,000 00

*Henry E. Fisher, resigned, to take effect April 1, 1898. Jos. A. Claypool appointed February 8, 1898 to fill vacancy.

†W. H. Doll, resigned, to take effect April 1, 1898. Guy Huffman appointed February 8, 1898 to fill vacancy.

‡C. W. Sutphin, Sr., died Dec. 8, 1897. T. H. Corson appointed to fill vacancy Dec. 14, 1897.

COLLECTORS OHIO CANAL.

Name.	Location.	Yearly salary.
Cryness La Rue	Cleveland	$900 00
J. H. Morrison	Akron	600 00
David Atwater	Massillon	300 00
*S. T. Naylor	Canal Dover	450 00
George Sykes	Roscoe	420 00
**Wm. M. Miller	Dresden	240 00
***S. M. Brown	Newark	180 00
Miles Sands	Carroll	200 00
†Gordon Moodie	Columbus	300 00
Wm. Parkhurst	Circleville	250 00
A. H. Reutinger	Chillicothe	300 00
‡George E. Barch	Waverly	250 00
C. H. Barbee	Portsmouth	200 00

*S. T. Naylor, resigned. W. W. Harvey appointed to fill vacancy, April 19, 1898.

**Wm. M. Miller, resigned. Jno. F. Poorman appointed to fill vacancy, February 8, 1898.

***S. M. Brown, resigned. H. P. Courtier appointed to fill vacancy, November 9, 1896.

†Gordon Moodie, resigned. Wm. Patton appointed to fill vacancy, February 8, 1898.

‡Geo. E. Barch, resigned. S. L. Patterson appointed to fill vacancy, March 8, 1898.

The collector at Roscoe serves on both the Ohio and Walhonding canal.

On account of the abandonment of the Hocking canal and the consequent lessening of official duties at the collectors' offices at Carroll and Columbus, the salary of the collector at the former place was reduced to $200, and that of the collector at Columbus to $300 per annum. The salary of the collector at Portsmouth was fixed at $200 per annum, and that of the collector at Dresden at $240, in consideration of additional services as lock-tender.

LOCK-TENDERS.

Miami and Erie Canal.

Name.	Location.	Monthly salary.
F. M. Montague	Toledo	$25 00
Samuel Charter	Maumee	25 00
John Allen	Miami	5 00
Joseph Reynolds	Providence	20 00
R. R. Bortle	Texas	15 00
Stilman Rose	Indepedence	15 00
Ira Green	Defiance	20 00
*G. Capper	Schooley's Locks	5 00
E. Viall	Lock 32	5 00
W. Koley	Hipp's Locks	5 00
*S. Galispie	Locks 29 and 30	5 00
*G. H. Otte	Ottoville	3 00
Wm. F. Smith	Delphos	35 00
John Rose	Spencerville	10 00
Jas. R. Byrum	Lock 14	5 00
W. Fosnight	St. Mary's and Locks 7 to 11	24 00
S. Marshall	Bulkhead	12 00
James Kohn	Canal patrolman, Delphos	30 00
Wesley McDonald	" St. Mary's	60 00
Wm. Theiman	New Bremen	25 00
Isaac Powell	Loramie Reservoir	10 00
Chas. Adams	Lockington	23 00
Eli Norviel	Lewiston Reservoir	10 00
Ben Hine	Port Jefferson	10 00
†H. Fair	Sidney	3 00
†John Lithicum	Summit Level	3 00
J. H. Buckner	Piqua	10 00
James Maly	"	10 00
George Dixon	Still House Lock	25 00
Louis Schaffer	Troy Feeder Lock	12 00
Chas. H. Lewis	Picayune Lock	10 00
Samuel Hunter	Three Locks	10 00
John Wood	Dayton	25 00
Thos. Sherlock	" Car Shops	3 00
Michael Hogan	" "	1 50
Philip Wentz	Snyder's Mill	10 00
Simon Strader	Carrollton	20 00
John Dreher	Miamisburg	10 00
John C. Gebhart	Sun Fish Lock	15 00
Michael Schafer	Franklin	10 00
Frank Dine	Middletown Feeder	40 00
Andy Barnickle	Middletown	10 00
Syl. Fleming	Amanda	18 00
Humphrey Campbell	Rockdale	10 00
J. N. Abbott	Hamilton	20 00
John Messner	Rialto	10 00
J. W. Gorman	Crecentville	10 00
French Whitehead	Lockland	22 00
Chas. E. Alexander, policeman	Cincinnati	65 00
†Theo. Ruettinger	Port Union	2 50
†J. N. Abbott	Hamilton (South of)	2 50
†Jas. Lindino	Woodsdale Island	2 50

* Employed during navigation only. † Flood-gate-tender.

OHIO CANAL.

Name.	Location.	Monthly salary.
Claude Duley	Pinery Feeder	$20 00
Lime Boughton	Peninsula	20 00
Chas. Lewis	Everett	20 00
Hiram Wells	Portage Locks	20 00
Wm. Mahoney	Akron—Lower Lock	25 00
Wm. S. McFarland	" Upper "	45 00
Henry Davis	Clinton	20 00
Wm. A. Warner	Akron Reservoir	5 00
Henry Lanz	Massillon	6 00
John Bailes	Navarre	15 00
John W. Bowsher	Trenton	20 00
Jonas Bury	Zoar	20 00
Wm. Smart	Adams' Mills	20 00
Benj. Richards	Licking Reservoir	15 00
John A. Spurgeon	" Feeder	25 00
Levi Wagner	Baltimore	15 00
John Benadum	Lockville	15 00
Wm. Vallett	Lockbourne	25 00
Henry Wells	Millport	10 00
Wm. Paster	Circleville	15 00
Geo. Rettig	" Dam	15 00
John Cook	Chillicothe	15 00
H. Laughon	Three Locks	15 00
Jesse Barnett	Higby's	15 00
Ben Lewis	Waverly	10 00
F. M. Temple	Union Mills	20 00

FINANCIAL STATEMENT, BOARD OF PUBLIC WORKS.

Receipts.

The amount of revenue from the public works of Ohio for the fiscal year ending November 15, 1898, is given in the following tables:

Miami and Erie Canal.

Offices.	Tolls.	Rents.	Total.
Cincinnati	$3,653 62	$20,670 87	$24,324 49
Lockland	1,845 45	141 00	1,986 45
Middletown	942 16	2,949 52	3,891 68
Dayton	273 53	4,486 50	4,760 03
Piqua	493 37	3,729 92	4,223 29
St. Mary's	105 88	6,791 63	6.897 51
Delphos	286 27	1,431 20	1,717 47
Defiance	1,320 80	704 02	2,024 82
Napoleon	572 72	2,264 00	2,836 72
Toledo	578 69	2,993 29	3,571 98
Total rents and tolls	$10,072 49	$46,161 95	$56,234 44
From sale of land	.....	.....	1,199 20
Total from all sources	.....	.....	$57,433 64

Ohio Canal—Northern Division.

Offices.	Tolls.	Rents.	Total.
Cleveland	$2,022 28	$1,647 83	$3,670 11
Akron	1,269 39	4,090 51	5,359 90
Massillon	1,421 48	504 10	1,925 58
Canal Dover	1,998 82	292 88	2,291 70
*Roscoe	29 91	1 760 00	1,789 91
Dresden	50	1,674 36	1,674 86
Total rents and tolls	$6,742 38	$9,969 68	$16,712 06
From sale of land	.....	.....	565 56
Total from all sources	.....	.....	$17,277 62

* Including receipts of Walhounding canal.

OHIO CANAL—SOUTHERN DIVISION.

Offices.	Tolls.	Rents.	Total.
Newark	.....	$707 17	$707 17
Carroll	.....	322 00	322 00
Columbus	$125 11	548 08	673 19
Circleville	320 99	585 91	906 90
Chillicothe	810 52	506 59	1,317 11
Waverly	110 87	580 00	690 87
Portsmouth	.....	206 00	206 00
Total rents and tolls	$1,367 49	$3,455 75	$4,823 24
From sale of land	.....	.....	279 68
Total from all sources	.....	.....	$5,102 92

RECAPITULATION.

Canals.	Land sold.	Tolls.	Rents.	Total.
Miami and Erie canal	$1,199 00	$10,072 49	$46 161 95	$57,433 64
Northern Division Ohio canal	565 56	6,742 38	9,969 68	17,277 62
Southern " " "	279 68	1,367 49	3,455 75	5,102 92
Totals	$2,044 24	$18,182 36	$59,587 38	$79,814 18

Amount of collections for fiscal year ending November 15, 1898	$79,814 18
Deduct amount charged on collectors' journal October 9, 1897, as receipts at Cincinnati office, on account of new dredge, and deducted November 30, 1897, from cash receipts	1,700 00
	$78,114 18
Deduct difference in account with collectors	40 20
	$78,073 98
Add amount due from collectors November 15, 1897	7,220 37
	$85,294 35
Deduct amount due from collectors November 15, 1898	5,079 91
	$80,214 44
Add balance in treasury November 15, 1897	6,490 67
	$86,705 11
Deduct attorney's fees found lapsed June 30, 1898	449 77
	$86,255 34
Partial appropriation	18,775 00
Deficiency appropriation	39,521 72
General appropriation	50,725 00
Total amount to be accounted for	$195,277 06

REFERENCE.

We would especially ask a perusal of the financial transactions of the Board for the fiscal year as submitted by our secretary. Also the annual report of the chief engineer of public works herein transmitted, showing the operations and physical conditions of the public works of the State, and his suggestions and recommendations for the betterment of the canal contained therein, which have our approval.

Respectfully,

EDWIN L. LYBARGER,
President and Acting Commissioner Division No. 1, Ohio Canal.
FRANK A. HUFFMAN,
Acting Commissioner Miami and Erie Canal, Division No. 3.
CHAS. A. GODDARD,
Acting Commissioner Division No. 2, Ohio Canal.

REPORT OF SECRETARY.

To the Honorable Board of Public Works:

GENTLEMEN: I have the honor to submit my report of the financial transactions of the Board for the fiscal year ending November 15, 1898.

DISBURSEMENTS.

The president of the Board, and the acting commissioners of the three grand divisions of the public works, issued to the several superintendents and others, on account of maintenance and repairs, salaries, etc., checks or requisitions upon the Auditor of State, in amounts exhibited in the tables found below, and which are accounted for by the itemized bills filed in the office of the Board of Public Works, copies of which are incorporated in this annual report under the head of *Abstract of money paid out*, showing *to whom, for what, and from which fund*, amounts were paid.

CHECKS ISSUED BY E. L. LYBARGER, ON ACCOUNT OF NORTHERN DIVISION OHIO CANAL.

Date.	To whom issued.	Name of appropriation.	Amount.
1897.			
Dec. 14	Wm. M. Hiltabidle	Northern Division Ohio Canal	$1,526 07
	Chas. H. Geidel	" "	597 60
1898.			
Jan. 11	Wm. M. Hiltabidle	" "	874 58
	Chas. H. Geidel	" "	624 39
Feb. 8	Wm. M. Hiltabidle	" "	1,088 67
	Chas. H. Geidel	" "	565 81
March 8	Wm. M. Hiltabidle	" "	1.641 71
	Chas. H. Geidel	" "	644 60
April 12	Wm. M. Hiltabidle	" "	2,355 14
	Chas. H. Geidel	" "	942 13
May 10	Wm. M. Hiltabidle	" "	2,375 50
	Chas. H. Geidel	" "	4,065 58
June 14	Wm. M. Hiltabidle	" "	2 266 53
	Chas. H. Geidel	" "	4,346 28
July 12	Wm. M. Hiltabidle	" "	2,815 49
	Chas. H. Geidel	" "	2,428 06
Aug. 9	Wm. M. Hiltabidle	" "	3,322 15
	Chas. H. Geidel	" "	2,318 55
Sept. 13	Wm. M. Hiltabidle	" "	1,102 64
	Chas. H. Geidel	" "	3,080 00
Oct. 10	Wm. M. Hiltabidle	" "	508 22
	Chas. H. Geidel	" "	400 00
Nov. 9	Wm. M. Hiltabidle	" "	1,468 89
	Chas. H. Geidel	" "	1,400 00
	Total		$42,788 59

RECAPITULATION.

Wm. M. Hiltabidle, Northern Division Ohio Canal	$21,345 59
Chas. H. Geidel, " "	21,443 00
Total	$42,788 59

CHECKS ISSUED BY CHAS. E. GROOS, ON ACCOUNT OF SOUTHERN DIVISION OHIO CANAL, DURING THE YEAR ENDING NOVEMBER 15, 1898.

Date.	To whom issued.	Name of appropriation.	Amount.
1897.			
Dec. 14	Wm. Hahn	Southern Division Ohio Canal	$175 00
	W. H. Kirkendall	" "	300 00
1898.			
Jan. 11	Wm. Hahn	" "	50 00
	W. H. Kirkendall	" "	51 72
	"	" "	150 00
Feb. 3	Wm. Hahn	" "	188 82
	Total		$910 54

CHECKS ISSUED BY CHAS. A. GODDARD, ON ACCOUNT OF SOUTHERN DIVISION OHIO CANAL, DURING THE YEAR ENDING NOVEMBER 15, 1898.

Date.	To whom issued.	Name of appropriation.	Amount.
1898.			
Mar. 8	Wm. Hahn	Southern Division Ohio Canal	$750 00
	W. H. Kirkendall	" " "	2,700 00
Apr. 12	Wm. Hahn	" " "	58 80
	W. H. Kirkendall	" " "	140 00
May 10	Wm. Hahn	" " "	1,804 42
	"	" " (deficiency)	2,000 00
	W. H. Kirkendall	" " Canal	4,860 59
	Geo. H. Watkins	" " "	3,404 13
	W. H. Kirkendall	" " (deficiency)	6,400 00
June 14	Wm. Hahn	" " Canal	977 50
	Geo. H. Watkins	" " "	6,444 26
July 12	Wm. Hahn	" " "	790 82
	Geo. H. Watkins	" " "	8,501 82
Aug. 9	Wm. Hahn	" " "	641 41
	Geo. H. Watkins	" " "	2,727 22
Sept. 13	F. C. Dietz	" " "	519 39
	Geo. H. Watkins	" " "	2,240 49
Oct. 10	F. C. Dietz	" " "	324 12
	Geo. H. Watkins	" " "	470 00
Nov. 9	F. C. Dietz	" " "	328 50
	Geo. H. Watkins	" " "	750 00
	Total		$39,838 47

RECAPITULATION.

Wm. Hahn	$7,397 95
W. H. Kirkendall	14,636 13
F. C. Dietz	1,172 01
Geo. H. Watkins	19,537 92
Total	$42,744 01

CHECKS ISSUED BY FRANK A. HUFFMAN, ON ACCOUNT OF MIAMI AND ERIE CANAL, DURING THE YEAR ENDING NOVEMBER 15, 1898.

Date.	To whom issued.	Name of appropriation.	Amount.
1897.			
Dec. 14	Chas. T. Hayman	Miami and Erie Canal	$2,206 89
	John O'Connor	"	3,321 55
	H. W. Meacham	"	1,933 47
1898.			
Jan. 11	Chas. T. Hayman	"	454 92
	John O'Connor	"	597 54
	H. W. Meacham	"	406 32
Feb. 8	Chas. T. Hayman	"	794 00
	John O'Connor	"	932 00
	H. W. Meacham	"	726 00
Mar. 8	Chas. T. Hayman	"	1,273 68
	John O'Connor	"	1,548 18
	H. W. Meacham	"	1,185 84
Apr. 12	Chas. T. Hayman	"	1,468 16
	John O'Connor	"	1,682 86
	H. W. Meacham	"	1,284 64
May 10	Chas. T. Hayman	"	4,585 00
	" (deficiency)		5,479 00
	John O'Connor	Miami and Erie Canal	4,795 00
	" (deficiency)		5,713 00
	H. W. Meacham	Miami and Erie Canal	3,178 00
	" (deficiency)		3,808 00
June 14	Chas. T. Hayman	Miami and Erie Canal	4,670 00
	John O'Connor	"	6,270 00
	H. W. Meacham	"	3,040 00
July 12	Chas. T. Hayman	"	1,025 00
	John O'Connor	"	1,550 00
	H. W. Meacham	"	770 00
Aug. 9	Chas. T. Hayman	"	4,200 00
	John O'Connor	"	6,775 00
	H. W. Meacham	"	3,375 00
Sept. 13	Chas. T. Hayman	"	865 00
	John O'Connor	"	1,120 00
	H. W. Meacham	"	725 00
Oct. 10	Chas. T. Hayman	"	1,410 50
	John O'Connor	"	1,718 00
	H. W. Meacham	"	1,140 00
Nov. 9	Chas. T. Hayman	"	2,960 00
	John O'Connor	"	3,410 00
	H. W. Meacham	"	2,020 00
	Total		$94,417 65

RECAPITULATION.

Chas. T. Hayman	$31,392 15
John O'Connor	39,433 23
H. W. Meacham	23,592 27
Total	$94,417 65

CHECKS ISSUED BY THE PRESIDENT OF THE BOARD OF PUBLIC WORKS ON THE FUNDS ANNUALLY APPROPRIATED FOR THE PAYMENT OF OFFICERS' SALARIES AND CONTINGENT EXPENSES, ETC., ETC.

Date.	To whom issued.	Name of appropriation.	Amount.
1897.			
Dec. 14	E. L. Lybarger	Member's salary	$66 67
	Chas. E Groce	"	66 67
	Frank A. Huffman	"	66 67
	E. L. Lybarger	Member's traveling expenses	50 00
	Chas. E. Groce	"	50 00
	Frank A. Huffman	"	50 00
	Charles E. Perkins	Engineer's salary	166 67
	Samuel Bachtell	"	133 33
	Wm. T. McLean	Secretary's salary	125 00
	R. Sullivant	Clerk's salary	58 33
	F. W. Schaub	Contingent expenses	21 75
	Wm. T. McLean	"	12 00
	C. U. Tel. Co	"	1 05
	W. U. Tel. Co	"	33
	Laning Printing Co	"	1 00
1898.			
Jan. 11	E. L Lybarger	Member's salary	66 67
	Chas. E. Groce	"	66 67
	Frank A. Huffman	"	66 67
	E. L. Lybarger	Member's traveling expenses	50 00
	Chas. E. Groce	"	50 00
	Frank A. Huffman	"	50 00
	Charles E. Perkins	Engineer's salary	166 67
	Samuel Bachtell	"	133 33
	Wm. T. McLean	Secretary's salary	125 00
	R. Sullivant	Clerk's salary	58 33
	F. W. Schaub	Contingent expenses	20 00
	Wm. T. McLean	"	14 00
	C. U. Tel. Co	"	10 85
	W. U. Tel. Co	"	2 44
	Crystal Ice Mfg. Co	"	18 00
	Postal Tel.-Cable Co	"	43
	W. D. Davies	Attorney's fees	125 00
	Ampt & Conroy	"	100 00
	H. P. Folsom	"	30 00
Feb. 8	E. L. Lybarger	Member's salary	66 66
	Chas. E. Groce	"	56 41
	Chas. A. Goddard	"	10 25
	Frank A. Huffman	"	66 66
	E. L. Lybargar	Member's traveling expenses	50 00
	Chas. E. Groce	"	50 00
	Frank A. Huffman	"	50 00
	Charles E. Perkins	Engineer's salary	166 66
	Samuel Bachtell	"	133 34
	Wm. T. McLean	Secretary's salary	125 00
	R. Sullivant	Clerk's salary	58 34
	F. W. Schaub	Contingent expenses	20 00
	Wm. T. McLean	"	10 00
	Oscar S. Lear	"	5 00
	McClelland & Co	"	2 50
	W. S. Wiggins	"	3 00
	Am. Exp. Co	"	35
	C. U. Tel. Co	"	1 00
	W. U. Tel. Co	"	25

DISBURSEMENTS—Continued.

Date.	To whom issued.	Name of appropriation.	Amount.
1898.			
Feb. 8	Adams Exp. Co	Contingent expenses	$0 35
	Harris & Cameron	Attorney's fees	255 00
	R. H. Wallace	"	100 00
	W. W. Campbell	"	50 00
Mar. 8	Frank A. Huffman	Member's salary	66 67
	Chas. A. Goddard	"	66 67
	E. L. Lybarger	"	66 67
	Frank A. Huffman	Member's traveling expenses	50 00
	Chas. A. Goddard	"	50 00
	E. L. Lybarger	"	50 00
	Chas. E. Perkins	Engineer's salary	166 67
	Samuel Bachtell	"	133 33
	Wm. T. McLean	Secretary's salary	125 00
	R. Sullivant	Clerk's salary	58 33
	F W. Schaub	Contingent expenses	20 00
	Wm. T. McLean	"	10 00
	Adams Exp. Co	"	30
	W. S. Wiggins	"	35
	Andrew Dobbie	"	3 00
	C. U. Tel. Co	"	95
	The M. C. Lilly & Co	"	75
	Cherrington P. and E. Co.	"	3 50
April 8	Frank A. Huffman	Member's salary	66 67
	Chas. A. Goddard	"	66 67
	E. L. Lybarger	"	66 67
	Frank A. Huffman	Member's traveling expenses	50 00
	Chas. A. Goddard	"	50 00
	E. L. Lybarger	"	50 00
	Chas. E Perkins	Engineer's salary	166 67
	Samuel Bachtell	"	133 33
	Wm. T. McLean	Secretary's salary	125 00
	R. Sullivant	Clerk's salary	58 33
	F. W. Schaub	Contingent expenses	20 00
	Wm. T. McLean	"	14 00
	C. U. Tel. Co	"	10 80
	American Exp. Co	"	25
	Adams Exp. Co	"	40
	Postal Tel.-Cable Co	"	31
	Cherrington P. and E. Co.	"	4 25
	F. C. DeLong	"	50
May 10	Frank A. Huffman	Member's salary	66 66
	Chas. A. Goddard	"	66 66
	E. L. Lybarger	"	66 66
	Frank A. Huffman	Member's traveling expenses	50 00
	Chas. A. Goddard	"	50 00
	E. L. Lybarger	"	50 00
	Chas. E. Perkins	Engineer's salary	166 66
	Samuel Bachtell	"	133 34
	Wm. T. McLean	Secretary's salary	125 00
	R. Sullivant	Clerk's salary	58 34
	F. W. Schaub	Contingent expenses	20 00
	W. T. McLean	"	10 00
	C. U. Tel. Co	"	3 60

DISBURSEMENTS—Continued.

Date.	To whom issued.	Name of appropriation.	Amount.
1898.			
May 10	Cherrington P. and E. Co.	Contingent expenses	$0 75
	W. U. Tel. Co.	"	25
	U. S. Exp. Co	"	50
	Wells-Fargo Exp. Co.	"	35
	H. Cole	"	95
	The Ruggles-Gale Co.	"	15 00
June 14	Frank A. Huffman	Member's salary	66 67
	Chas. A. Goddard	"	66 67
	E. L. Lybarger	"	66 67
	Frank A. Huffman	Member's traveling expenses	50 00
	Chas. A. Goddard	" "	50 00
	E. L. Lybarger	" "	50 00
	Chas. E. Perkins	Engineer's salary	166 67
	Samuel Bachtell	"	133 33
	Wm. T. McLean	Secretary's salary	125 00
	R. Sullivant	Clerk's salary	58 33
	F. W. Schaub	Contingent expenses	30 00
	Wm. T. McLean	"	10 00
	C. U. Tel. Co	"	50
	Borcher's Carpet Cl. Co.	"	9 10
	F. W. Herbst	"	50
	Daniel J. Ryan	Attorney's fees	100 00
July 12	Frank A. Huffman	Member's salary	66 67
	Chas. A. Goddard	"	66 67
	E. L. Lybarger	"	66 67
	Frank A. Huffman	Member's traveling expenses	50 00
	Chas. A. Goddard	" "	50 00
	E. L. Lybarger	" "	50 00
	Chas. E. Perkins	Engineer's salary	166 67
	Samuel Bachtell	"	133 33
	Wm. T. McLean	Secretary's salary	125 00
	R. Sullivant	Clerk's salary	58 33
	F. W. Schaub	Contingent expenses	20 00
	Wm. T. McLean	"	13 00
	C. U. Tel. Co	"	8 00
	Cherrington P. and E. Co.	"	1 25
Aug. 9	Frank A. Huffman	Member's salary	66 66
	Chas. A. Goddard	"	66 66
	E. L. Lybarger	"	66 66
	Frank A. Huffman	Member's traveling expenses	50 00
	Chas. A. Goddard	" "	50 00
	E. L. Lybarger	" "	50 00
	Charles E. Perkins	Engineer's salary	166 66
	Samuel Bachtell	"	133 34
	Wm. T. McLean	Secretary's salary	125 00
	R. Sullivant	Clerk's salary	58 34
	F. W. Schaub	Contingent expenses	20 00
	Wm. T. McLean	"	12 00
	C. U. Tel. Co	"	25
Sept. 13	Frank A. Huffman	Member's salary	66 67
	Chas. A. Goddard	"	66 67
	E. L. Lybarger	"	66 67
	Frank A Huffman	Member's traveling expenses	50 00
	Chas. A. Goddard	" "	50 00
	E. L. Lybarger	" "	50 00

DISBURSEMENTS—Concluded.

Date.	To whom issued.	Name of appropriation.	Amount.
1898.			
Sept. 13	Charles E. Perkins	Engineer's salary	$166 67
	Samuel Bachtell	"	133 33
	Wm. T. McLean	Secretary's salary	125 00
	R. Sullivant	Clerk's salary	58 33
	F. W. Schaub	Contingent expenses	20 00
	Wm. T. McLean	"	12 00
	C. U. Tel. Co	"	1 25
	Postal Tel.-Cable Co	"	25
	E. H. Sell, mgr	"	1 50
Oct. 10	Frank A. Huffman	Member's salary	66 67
	Chas. A. Goddard	"	66 67
	E. L. Lybarger	"	66 67
	Frank A. Huffman	Member's traveling expenses	50 00
	Chas. A. Goddard	" "	50 00
	E. L. Lybarger	" "	50 00
	Chas. E. Perkins	Engineer's salary	166 67
	Samuel Bachtell	"	133 33
	Wm. T. McLean	Secretary's salary	125 00
	R. Sullivant	Clerk's salary	58 33
	F. W. Schaub	Contingent expenses	20 00
	Wm. T. McLean	"	12 00
	C. U. Tel. Co	"	8 00
	W. U. Tel. Co	"	68
	Adams Exp. Co	"	25
	McClelland & Co	"	60
Nov. 9	Frank A. Huffman	Member's salary	66 66
	Chas. A. Goddard	"	66 66
	E. L. Lybarger	"	66 66
	Frank A. Huffman	Member's traveling expenses	50 00
	Chas. A. Goddard	" "	50 00
	E. L. Lybarger	" "	50 00
	Chas. E. Perkins	Engineer's salary	166 66
	Samuel Bachtell	"	133 34
	Wm. T. McLean	Secretary's salary	125 00
	R. Sullivant	Clerk's salary	58 34
	F. W. Schaub	Contingent expenses	25 00
	Wm. T. McLean	"	12 00
	U. S. Exp. Co	"	85
	C. U. Tel. Co	"	35
	Cherrington P. and E. Co	"	1 10
	Gottschall & Brown	Attorney's fees	225 00
	Total		$11,510 49

RECAPITULATION.

To whom paid.	Name of appropriation.	Amount.
Chas. A. Goddard	Member's salary	$610 25
"	" traveling expenses	450 00
Chas. E. Groce	" salary	189 75
"	" traveling expenses	150 00
E. L. Lybarger	" salary	800 00
"	" traveling expenses	600 00
Frank A. Huffman	" salary	800 00
"	" traveling expenses	600 00
Chas. E. Perkins	Engineer's salary	2,000 00
Samuel Bachtell	"	1,600 00
Wm. T. McLean	Secretary's salary	1,500 00
R. Sullivant	Clerk's salary	700 00
F. W. Schaub	Contingent expenses	256 75
W. T. McLean	"	141 00
C. U. Telephone Co	"	46 60
W. U. Telegraph Co	"	3 95
Postal Telegraph-Cable Co	"	99
Laning Printing Co	"	1 00
Crystal Ice Mfg. Co	"	18 00
F. C. DeLong	"	50
Oscar S. Lear	"	5 00
McClelland & Co	"	3 10
American Express Co	"	60
Adams "	"	1 30
U. S. Express Co	"	1 35
The M. C. Lilley & Co	"	75
The Cherrington P. and E. Co	"	10 85
The Borcher's Carpet Cleaning Co	"	9 10
W. S. Wiggins	"	3 35
Andrew Dobbie	"	3 00
The Wells-Fargo Express Co	"	35
H. Cole	"	95
The Ruggles-Gale Co	"	15 00
F. W. Herbst	"	50
E. H. Sell, mgr	"	1 50
Harris & Cameron	Attorneys' fees	255 00
Ampt. & Conroy	"	100 00
W. D. Davies	"	125 00
H. P. Folsom	"	30 00
W. W. Campbell	"	50 00
R. H. Wallace	"	100 00
D. J. Ryan	"	100 00
Gottschall & Brown	"	225 00
Total		$11,510 49

The foregoing checks are charged to the following accounts, viz.:

What fund.	Amount.
Canal repairs, etc	$179,950 25
Members' salaries	2,400 00
" traveling expenses	1,800 00
Engineers' salaries	3,600 00
Secretary's salary	1,500 00
Clerk's salary	700 00
Contingent expenses	525 29
Attorneys' fees	985 00
Total	$191,460 54
Balance on hand November 15, 1898	3,816 52
Grand total	$195,277 06

The balance in treasury, $3,816.52, belongs to the following funds, viz.:

What fund.	Amount.
Canal repairs	$1,157 82
Members' salaries	600 00
" traveling expenses	450 00
Engineer's salary	900 00
Secretary's salary	375 00
Clerk's salary	175 00
Contingent expenses	133 70
Attorneys' fees	25 00
Total	$3,816 52

NAME OF APPROPRIATION.

MIAMI RIVER IMPROVEMENT.

Of the amount remaining on hand at the end of the fiscal year ending November 15, 1897, ($439.77) to the credit of the Miami river improvement, $433.70 was paid to John O'Connor, superintendent on vouchers approved and on file, and the remainder, $6.07 was paid to James C. Wonders, civil engineer for surveying, thus exhausting the appropriation made under House Bill No. 478, passed April 27, 1896.

NAME OF APPROPRIATION,

KIRKERSVILLE FEEDER IMPROVEMENT.

House Bill No. 268, passed March 30, 1898, appropriated five thousand ($5,000) dollars for the improvement of the Kirkersville feeder, against which amount checks have been issued by the acting commissioner of the southern division of the Ohio canal as follows:

Sept. 13, 1898.	To F. C. Dietz, Superintendent	$329 90
Oct. 10, "	" "	429 11
Nov. 9, "	" "	81 39
Total		$840 40

Leaving a balance at the close of the fiscal year ending November 15, 1898, of $4,159.60.

NAME OF APPROPRIATION.

FLOOD-GATES NEAR LOCKBOURNE.

Senate Bill No. 76, passed April 21, 1898, appropriated the sum of five hundred ($500) dollars for the repair of flood-gates near Lockbourne, on the southern division of the Ohio canal; and this amount has been expended under the supervision of the Acting Commissioner Hon. C. A. Goddard, and his Superintendent George H. Watkins who has filed bills agreeable to the requirements in such matters.

MISCELLANEOUS.

Senate Bill No. 76 also appropriated the sum of $2,500 to pay a part of the expense of constructing necessary sewers for the drainage of certain territory within and adjacent to the village of New Bremen; no part of which sum has as yet been expended.

House Bill No. 353, passed March 3, 1898, appropriated $1,680 to pay David Banker for injury to his lands by overflow of water from breaking of the State dam levee, and this amount was paid by voucher issued by the acting commissioner of the Miami and Erie canal to Hon. S. C. Landis, attorney for Mr. Banker.

House Bill No. 836, passed April 25, 1898, appropriated $220 to reimburse Peter Fornoff for damages sustained by overflow of the Columbus feeder of the Ohio canal, and which amount was paid to the attorney of Mr. Fornoff by the Auditor of State.

CONDENSED STATISTICS.

The act to provide for internal improvements by navigable canals was passed by the General Assembly of Ohio, on February 4, 1825.

GRANTS OF LAND.

The following statement of lands granted to the State by the general government, to aid in the construction of navigable canals, was taken from the commissioner's report of the general land office of 1854, and is deemed correct:

Miami and Dayton canal, $421,397\frac{73}{100}$ acres; Wabash and Erie, $292,688\frac{38}{100}$ acres; and 500,000 acres for general canal purposes to be selected by the Governor.

The total number of acres, $1,214,086\frac{5}{100}$, excepting about 32,000 acres for reservoir purposes, were sold for about $2,200,000. In addition to these grants by the general government, the State received material aid from private individuals and corporations along the different canals in donations of land, right of way and money, but just to what amount we are unable to find from the papers and books in the office of the Board of Public Works.

OHIO CANAL.

The Ohio canal was commenced in 1825, and completed in 1833, extending from Lake Erie, at Cleveland, to the Ohio river at Portsmouth, a distance of 309 miles, with 25 miles of feeders, or a total of 334 miles and reservoirs. Cost for construction, $4,695,-203.69. The minimum breadth of this canal at water line is 40 feet; at bottom, 26 feet; and the depth, 4 feet. The number of lift-locks on this canal is 152; number of guard-locks, 9.

MIAMI AND ERIE CANALS.

The main canal, extending from the Ohio river at Cincinnati to Lake Erie at Toledo, 250 miles in length, cost $5,920,200.41; branch from Junction to State line, 18 miles, $450,000; Sidney feeder, from Lockington to Port Jefferson, 14 miles, $391,258.32; a total of 282 miles, and cost $6,762,458.73.

The following reservoirs belong to this canal: Grand reservoir, Mercer county, containing about 17,000 acres, cost $528,222.07; Lewistown reservoir, in Logan county, containing about 7,200 acres, cost $600,000; and the Loramie reservoir, in Shelby county, containing about 1,800 acres, cost, exclusive of canal, $22,000, which amount is included in the construction of the canal. Total cost of the Miami and Erie canal, including reservoirs, $8,062,680,80.

The minimum breadth of this canal at water line, from Cincinnati to Dayton, is 40 feet; at the bottom, 26 feet; and the depth, 4 feet. From Dayton to Junction, breadth at top water line, 50 feet; at the bottom, 36 feet; and depth, 5 feet. From Junction to Toledo, the width at top water line is 60 feet; at the bottom, 46 feet; and the depth, 6 feet. The number of locks is 105.

HOCKING CANAL.

Extending from Carroll at the junction with the Ohio canal to Athens, 56 miles. Cost of construction, $975,481.01. The number of lift-locks is 26. The dimensions of this canal are the same as the Ohio canal. *Abandoned for canal purposes by the Legislature in* 1894. See Senate Bill No. 315, passed May 18, 1894.

WALHONDING CANAL.

Extending from Roscoe to Rochester, 25 miles. Commenced in 1836, completed in 1842. Cost of construction, $607,268.99. The number of lift-locks is 11; number of guard-locks, 1. The dimensions of this canal are the same as the Ohio canal. *All of this canal lying west and north of lock No.* 5, *a length of* 19 *miles, was abandoned April* 27, 1896. See H. B. No. 508, passed that date.

RECAPITULATION.

Cost of construction of the canals, including reservoirs and feeders, $14,340,572.59. Number of lift-locks, 294; number of guard-locks, 10.

The three tables following show the receipts and expenditures annually, from the opening of canals, 1827, to November 15, 1898.

TABLE SHOWING THE EXPENDITURES EACH YEAR FOR SUPERINTENDENCE, REPAIRS AND COST OF COLLECTION ON THE OHIO CANALS, FROM 1827 TO 1898, INCLUSIVE.

Year.	Ohio canal.	Miami and Erie canal.	Hocking canal.	Walhonding canal.	Total on all the canals.
1827	$700 00	.....	.....	.....	$700 00
1828	900 00	.....	.....	.....	900 00
1829	1,100 00	$11,529 59	.....	.....	12,629 59
1830	1,300 00	7,138 05	.....	.....	8,438 05
1831	2,100 00	7,155 06	.....	.....	9,255 06
1832	3,600 00	9,937 91	.....	.....	13,537 91
1833	33,740 00	7,643 83	.....	.....	41,383 83
1834	79,713 68	10,165 37	.....	.....	89,879 05
1835	81,711 15	19,152 57	.....	.....	100,863 72
1836	91,402 26	30,993 77	.....	.....	122,396 03
1837	123,463 22	49,231 91	.....	.....	172,695 13
1838	202,248 30	35,357 25	.....	.....	237,605 55
1839	204,709 65	47,491 19	.....	.....	252,200 84
1840	122,249 65	25,053 55	.....	.....	147,303 20
1841	133,454 53	53,462 55	.....	.....	186,917 08
1842	139,165 87	23,560 70	.....	.....	162,726 57
1843	126,046 24	36,826 05	.....	.....	162,872 29
1844	122,052 21	37,081 55	.....	$1,238 10	160,371 86
1845	126,274 28	53,511 52	$5,580 04	3,137 61	188,503 40
1846	78,433 09	115,668 03	5,105 56	1,483 56	200,690 24
1847	120,728 24	107,380 25	8,067 32	5,155 59	241,331 40
1848	137,803 28	132,050 59	17,826 17	1,875 53	289,555 27
1849	120,283 14	259,706 84	10,712 85	2,523 57	393,206 40
1850	124,754 57	151,346 57	12,221 14	2,066 63	390,388 91
1851	137,262 50	179,311 73	8,376 88	4,351 60	329,302 61
1852	112,867 52	270,471 18	14,540 85	3,064 32	400,443 87
1853	142,281 71	269,435 44	9,088 61	2,151 53	422,957 29
1854	117,847 89	216,371 97	10,867 31	1,796 85	346,884 02
1855	106,145 05	233,107 57	7,741 98	1,169 61	348,164 21
1856	120,299 54	236,193 62	41,872 86	12 14	398,378 16
1857	125,645 15	172,047 70	29,399 32	5 84	327,098 01
1858	155,497 30	157,401 80	26,745 93	651 85	340,295 88
1859	96,407 58	159,813 90	15,389 99	2,529 65	274,141 12
1860	180,858 97	148,514 64	12,124 17	4,313 19	345,810 97
1861	36,534 70	69,697 27	6,836 80	2,004 56	114,573 33
1862	5,036 69	1,025 74	375 00	.....	6,437 43
1863	2,915 37	1,050 00	694 14	.....	4,659 51
1864	2,419 02	11 90	.....	.....	2,430 92
1865	2,394 24	5,472 66	.....	.....	7,856 90
1866	3,733 34	2,144 14	378 79	.....	6,256 27
1867	6,699 66	2,317 29	.....	.....	9,016 95
1868	9,533 33	998 18	.....	.....	10,531 51
1869	5,300 00	3,879 20	.....	.....	9,179 20
1870	3,067 38	13,601 79	968 00	.....	17,637 17
1871	1,943 96	11,583 75	78 18	.....	13,605 89
1872	4,844 04	7,015 68	.....	.....	11,859 72
1873	22,948 78	6,914 10	.....	.....	29,862 88
1874	1,919 03	11,319 35	.....	.....	13,238 38
1875	1,961 04	1,001 15	.....	.....	2,962 13
1876	2,097 16	14,325 87	900 00	.....	17,323 03
1877	1,961 04	2,019 78	2,719 25	459 84	7,159 91
1878	40,282 39	49,717 78	8,597 88	676 09	99,274 14
1879	68,269 14	82,547 69	9,833 13	473 85	161,123 81
1880	85,434 94	108,972 95	10,830 05	.....	205,237 94
1881	88,178 10	86,279 87	11,430 24	.....	185,888 21
1882	82,102 22	101,769 14	8,674 36	400 00	192,945 72

TABLE SHOWING THE EXPENDITURES EACH YEAR, ETC.—Concluded.

Year.	Ohio canal.	Miami and Erie canal.	Hocking canal.	Walhonding canal.	Total on all the canals.
1883	$92,666 58	$47,363 79	$34,770 43	.....	$174,804 80
1884	122,644 86	89,596 78	17,684 63	$489 56	230,415 83
1885	103,180 87	98,449 55	7,458 13	1,511 74	210,600 29
1886	87,046 74	88,935 64	10,237 76	10,630 72	196,850 86
1887	103,281 89	71,431 06	5,529 32	4,578 62	184,820 89
1888	123,690 87	98,838 94	7,379 67	2,095 18	232,004 66
1889	88,519 30	68,353 19	6,219 11	890 15	163,981 75
1890	80,512 64	79,137 41	4,318 79	945 12	164,913 96
1891	89,773 15	78 685 68	1,938 10	1,028 35	171,425 28
1892	85,027 86	97,434 09	5,731 51	860 66	189,054 12
1893	83,333 61	63,092 29	3,215 54	1,059 99	150,701 43
1894	105,490 39	118,627 21	4,396 65	2,843 27	231,357 52
1895	67,072 80	80,583 84	.....	.....	147,656 64
1896	77,912 51	100,218 95	.....	.....	178,131 46
1897	64,685 36	83,642 02	.....	.....	148,327 38
1898	85,532 60	94,417 65	.....	.....	179,950 25
Totals	$5,412,494 13	$5,216,647 12	$407,256 44	$68,474 07	$11,104,871 80

TABLE SHOWING THE RECEIPTS ON ALL CANALS, FROM 1827 TO 1898, INCLUSIVE.

Year.	Ohio canal.	Miami and Erie canal.	Hocking canal.	Walhonding canal.	Total on all the canals.
1827	$1,500 00	.....	.....	.....	$1,500 00
1828	4,000 00	$8,042 70	.....	.....	12,042 70
1829	27,000 00	20,941 36	.....	.....	47,941 36
1830	30 493 93	30,082 33	.....	.....	60,576 26
1831	64,864 17	36,643 88	.....	.....	101,508 05
1832	79,982 48	36,847 47	.....	.....	116,829 95
1833	136,555 70	50,470 63	.....	.....	187,026 33
1834	164,488 98	50,040 99	.....	.....	214,529 97
1835	185,664 48	51,917 00	.....	.....	237,581 48
1836	211,823 32	50,116 52	.....	.....	261,939 84
1837	293,428 79	62,833 40	.....	.....	356,262 19
1838	382,135 96	82,863 09	.....	.....	464,999 05
1839	423,599 84	82,601 19	.....	.....	506,201 03
1840	452,122 03	74,612 88	$5,953 69	.....	532,688 60
1841	416,202 63	76,718 17	2,518 26	.....	495,439 06
1842	387,442 22	71,460 34	4,215 07	$610 17	463,727 80
1843	322,754 82	105,640 09	4,349 33	837 77	433,582 01
1844	343,710 99	139,844 25	5,286 44	1,976 78	490 818 46
1845	260,369 33	185,243 78	5,497 83	1,282 95	452,393 89
1846	336,339 69	233,527 24	5,351 52	1,190 71	576,409 16
1847	452,580 76	292,087 00	7,299 14	2,328 77	754,195 67
1848	418,530 37	325,297 32	8,746 98	1,933 01	754 507 68
1849	362,630 48	322,244 43	8,354 84	1,594 72	694,824 47
1850	388,905 93	311,589 27	8,077 44	2,549 04	711,021 68
1851	432,711 38	351,897 72	11,802 04	2,613 44	799,024 58
1852	308,937 40	308,984 56	9,957 25	1,880 80	629,758 01
1853	258,793 09	323,599 97	11,912 21	1,233 25	595,538 53
1854	192,837 18	280,115 80	12,597 18	223 66	485,773 82
1855	196,164 61	229,370 57	16,279 35	377 20	442,191 73
1856	189,506 55	119,947 02	11,118 29	501 89	321,073 75
1857	155,598 11	153,733 37	18,219 41	268 54	327,819 43
1858	108,771 84	153,928 09	16,367 54	798 46	279,865 93
1859	88,205 85	127,610 10	18,336 36	527 18	234,679 49
1860	90,968 39	159,476 64	16,494 28	789 70	267,729 01
1861	36,534 70	64 632 31	7,363 48	755 04	109,285 53
1862	5,036 69	4,664 00	285 67	.....	9,986 36
1863	.....	6,186 11	.....	.....	6,186 11
1864	.....	3,531 66	.....	.....	3,531 66
1865	2,790 50	800 00	.....	.....	3,590 50
1866	2,199 50	.....	.....	.....	2,199 50
1867	5,300 00	.....	.....	.....	5,300 00
1868	1,200 00	.....	.....	.....	1,200 00
1869	.....	2,400 00	.....	.....	2,400 00
1870	.....	.....	.....	.....	.....
1871	.....	311 00	.....	.....	311 00
1872	.....	.....	.....	.....	.....
1873	.....	.....	.....	.....	.....
1874	.....	.....	.....	.....	.....
1875	.....	.....	.....	.....	.....
1876	.....	.....	.....	.....	.....
1877	.....	.....	.....	.....	*401,003 09
1878	54,026 99	54,138 89	5,513 98	5,516 98	119,196 84
1879	76 609 21	112,090 32	8,185 69	275 32	197,160 54
1880	77,545 66	111,259 67	19.235 58	7,470 45	215,511 36
1881	61,819 03	109,122 88	6,304 45	608 41	177,854 77
1882	57,703 25	98,764 97	5,614 43	1,573 89	163,656 54
1883	44,873 52	88,904 17	3,693 47	920 42	138,391 58

TABLE SHOWING THE RECEIPTS ON ALL CANALS, ETC.—Concluded.

Year.	Ohio canal.	Miami and Erie canal.	Hocking canal.	Walhonding canal.	Total on all the canals.
1884	$37,787 79	$83,992 14	$2,271 41	$448 30	$124,499 64
1885	25,149 98	79,156 21	2,587 18	71 95	106,965 32
1886	27,071 78	76,043 57	3,199 29	945 71	107,260 35
1887	28,932 35	87,200 36	4,138 38	932 34	121,203 43
1888	29,509 46	75,955 13	3,798 36	906 02	110,168 97
1889	28,005 47	79,476 82	2,605 15	892 12	110,979 56
1890	29,489 20	73,788 02	1,629 17	933 18	105,839 57
1891	42,756 24	63,876 47	856 38	1,023 48	108,512 57
1892	24,990 37	86,722 96	1,197 87	923 64	113,834 34
1893	29,023 90	66,211 86	689 33	588 00	96,513 09
1894	22,716 35	74,716 75	120 51	6,671 73	104,225 34
1895	24,544 25	80,324 41	.....	†	104,868 66
1896	25,591 24	97,327 12	.....	†	122,918 36
1897	26,132 17	80,293 14	.....	†	106,425 31
1898	22,380 54	57,433 64	.....	†	79,814 18
Totals	$9,019,591 46	$6,729,603 75	$288,469 42	$54,972 14	$16,493,640 74

† Receipts from Walhonding canal included in Ohio canal receipts.
* From lessees and receiver from 1861 to 1878, inclusive.

TABLE SHOWING THE GROSS RECEIPTS, TOTAL EXPENDITURES AND NET EARNINGS FROM 1827 TO 1898, INCLUSIVE.

Year.	Gross receipts.	Total expenditures.	Net earnings.
1827 to 1898 (inclusive)	$16,493,640 74	$11,104 871 80	$5,388,768 94

The Muskingum river improvement, having passed into the possession of the general government in 1887, I have omitted from the above tables the receipts and expenditures on said river, and only include the canals now in the possession of the State, except the recently abandoned Hocking canal; statistics of which are listed for reference.

On the second day of June, 1861, the public works of Ohio were leased by the act of the Legislature, passed May 9, 1861, for twenty thousand and seventy-five dollars ($20,075) per annum. Said lease continued in force until December 1, 1877, at which time the lessees abandoned the public works and by appointment of the superior court of Montgomery county they were placed in the hands of a receiver until May 15, 1878, at which time the State Board again took possession of the public works of Ohio.

Amount received from lessees, 16½ years, at $20,075	$331,237 50
Amount received from December 1, 1877, to May 15, 1878	69,765 59
Total amount received and included in above table	$401,003 09

The expenditures by the Board of Public Works for superintendence and repairs ceased with the transfer of the canals to the lessees. All expenditures during that time were for the settlement of prior claims, awards of damages, expenses of the office of the Board, expenses incurred in the appraisement of personal property sold to the lessees, and the payment of outstanding indebtedness provided for by the act "making appropriations for the maintenance of the public works," passed May 13, 1861.

Under the law authorizing the lease of the public works of the State, C. S. Hamilton was appointed by the Governor, Paul Weatherby by the Board of Public Works, and John G. Isham by the lessees, to appraise the personal property of the State, which the lessees were required by said act to purchase. The value of the property appraised by them and transferred to the lessees amounted to fourteen thousand one hundred and seventy-three and 64-100 dollars ($14,173.64).

NOTE—The foregoing items of "condensed statistics" are repeated in each annual report for the information of interested parties who have not a complete file of this Board's reports for reference, to enable them to follow the changes that have taken place, for instance, the abandonment of the Hocking and a part of the Walhonding canals, also the successive changes in footings of receipts and expenditures.

Respectfully submitted,

WM. T. MCLEAN,
Secretary.

Report of

The Chief Engineer

Public Works of Ohio.

1898.

REPORT OF CHIEF ENGINEER.

To the Honorable, the Board of Public Works of Ohio:

GENTLEMEN: In compliance with the requirements of the Legislature and your instructions, I have the honor to submit herewith for your consideration my annual report of the operation of the public works of the State for the fiscal year ending on the 15th day of November, 1898, with suggestions and recommendations which I have deemed pertinent to the subject matter.

EMERGENCIES.

The canals of the State, especially that portion lying on the southern water shed, suffered unusual damage on account of the unprecedented rain that occurred on the 23d and 24th of March, the canals suffering as did all property in the State that was so situated as to be at the mercy of the unusually high waters that prevailed during that time.

Although the devastation of the public works was greater than that sustained for many years, it is at least gratifying to be able to say that considering the loss to railroads, highways and to general public and private property of the State, the damage accruing to the canals was very much less than it might have been proportionately, and than could have reasonably been expected.

In this report I beg to refer you to my official report on the subject, dated March 30, giving you a statement of facts in relation thereto, estimating the damages to the canals as follows:

To the M. & E. canal from Cincinnati to Toledo	$14,700 00
Northern Div. Ohio canal from Cleveland to Dresden	12,316 00
Southern Div. Ohio canal, Dresden to Portsmouth	13,814 00
Making a total damage to the entire public works of	$40,830 00

chargeable strictly to causes of an emergency nature.

The report calls your attention to the fact that the damages were mostly confined to the embankments of the canal, and that the principal and most expensive structures, such as locks, dams, waste ways and aqueducts (except the acqueduct at Newark which collapsed) escaped with very little damage, thereby demonstrating that the maintenance and care of these structures have been carefully attended to, and that the principal structures, by standing the great strain that was thrust upon them by the excessively high water, have proved that they possess a greater factor of safety in their capacity than could naturally be expected considering their worn condition and great age.

PHYSICAL CONDITIONS.

Excepting the emergency damages of March, the public works during the past season were unusually free from disturbances other than the usual wear and tear incident to ordinary causes.

The moneys appropriated for your use in the maintenance of the canals by the Legislature have been judiciously and economically expended, the problem to the department being, how, with the insufficient funds at your disposal, to make a creditable showing for the betterment of the entire system under your supervision, the lack of proper funds forcing a policy on the management of your department which has resulted in the fact that, while it can be justly maintained that the greater portion of the canals show a decided improvement in their physical condition, there are portions that are fast deteriorating and falling into decay by a process of actual starvation.

This condition presents a serious difficulty that can only be solved by the Legislature in larger appropriations for the maintenance and betterment of the canal system, a question of economics that should be placed before them in the most favorable manner possible and in its true light, impressing upon them and the administration the responsibility that must rest with them in determining the future of our public works.

The Legislature should in fact treat you with more liberality than could properly be accorded other departments of State, for the reason that you are compelled to anticipate over half of your appropriation as earnings; that the State's property under your special care covers a much wider expanse than that in the care of other departments, is more exposed to destructive elements and is more unstable on account of the great age of its structures, covering some 600 miles in length and reservoirs of some 36,000 acres in area; that you have structures to maintain that have cost the State millions of dollars in their erection, which if not safely cared for by sufficient money and no uncommon attention and skill, would be a menace not only to property public and private, but to life as well; that you have to contend with bad conditions (which you are powerless to remedy for want of sufficient means) that must necessarily affect the earning capacity of your department, which you are compelled to anticipate in making up your estimates of money required, in the fullest amount.

There has been paid out during the fiscal year for "canal repair accounts" in the operation of your department, exclusive of office and contingent expenses and attorneys' fees, the sum of $179,950.25, of which amount $79,814.18 are receipts from earnings, the balance being made up by direct appropriation of the Legislature, chargeable in no small amount to the emergency account referred to.

It will be noticed from an examination of your secretary's financial statement, that the past year's receipts from earnings are much less than those of recent years, for the reason that navigation was seriously disturbed during the early part of the season, and that many of the accounts that have been rendered for the year remain unpaid; these will be collected and credited to next year's business when they will make a correspondingly larger showing.

I am pleased to refer you to that part of this paper found under the head of "Reports of Repairs," especially to that part bearing on the question of "new work and repairs required for this season's operations," given for each subdivision of the canals.

KIRKERSVILLE FEEDER.

House Bill No. 268 passed by the 73d General Assembly, appropriating the sum of $5,000 "to complete the improvement of deepening, widening and straightening the Kirkersville feeder to Buckeye lake, (Licking reservoir), and to make repairs to the gates and banks of said lake," has been complied with so far as has been possible.

Complete surveys, plans and cross sections have been made for the improvement by E. C. Egerton, a civil engineer, under my instructions, and it is expected that as soon as the weather will permit, during the early part of next season, the work will be completed in accordance with the act and within the moneys appropriated.

NEW BREMEN DITCH MATTER.

The controversy in the establishment of a "route for the construction of sewers for the drainage of certain territory in and adjacent to the village of New Bremen," in respect to Senate Bill No. 76 of the 73d General Assembly, appropriating $2,500 for that purpose, has been adjusted agreeably to all the principal parties interested, by a resolution passed by your Honorable Board, permitting the commissioners of Auglaize county to construct the outlet for said sewers under the Miami and Erie canal, at the culvert first north of New Bremen, in conformity to your usual restrictions, and also agreeably to the following agreement properly executed by the council of the village of New Bremen, and your chief engineer, establishing a route of sewer in respect to the act referred to, to-wit:

"Know all men by these presents: That in accordance with the provisions of section 2 of an act of the Legislature of the State of Ohio, being Senate Bill No. 76, passed April 21, 1898, found in Ohio Laws, volume 93, pages 187 and 188, it is hereby mutually agreed by and between the council of the village of New Bremen, Ohio, and Chas. E. Perkins, the engineer in charge of the construction of certain sewers in and adjacent to said village, under the provisions of said act, that the following route be and is hereby adopted for the sewers described in said act, to-wit:

"Commencing at the intersection of Cherry and Walnut streets in said village; thence north on Walnut street to First street; thence east on First street to Jefferson street; thence north on Jefferson street to the Lock Two road; thence northeasterly on said Lock Two road to a point near and opposite the culvert under the canal at the Dry feeder; thence westerly under said canal to a point on the west side of said canal, and there ending, being about 3,800 feet in length.

"It is further agreed and understood that a sewer or ditch along the route above described, be constructed by the commissioners of Auglaize county, Ohio, under certain ditch proceedings now pending before them, provided, that the sum of $2,500 appropriated by the above referred to act, be used first in paying for said sewer or ditch, and the cost above that sum be assessed by said commissioners against the property benefited according to benefits."

The terms of the above agreement have been accepted by the commissioners of Auglaize county, and have been properly made a part of their regular county ditch proceedings, at last settling a dispute and controversy over the establishment of this sewer that has waged for a dozen years.

Samuel Craig, Esq., county surveyor of Auglaize county, has been appointed engineer of construction, and the work is to be done without further delay under my general supervision.

ELECTRIC CANAL BOAT PROPULSION.

The 73d General Assembly, by an act known as House Bill No. 901 authorized and empowered your Honorable Board by and with the approval of the Governor and Attorney General, "to grant by lease or permit to any party or company, the right to make any experiments with electricity as a motive power for the propulsion of boats or other craft on the Miami and Erie canal," under certain other conditions and restric-

tions, so that such lease or permit shall not interfere with the control of the canal by the Board of Public Works, and provided that animal or other motive power used at present, or other privilege now enjoyed, shall not be in any manner interfered with.

The act contains the following preamble, explanatory of the motive of the bill which is worthy of most careful consideration:

"WHEREAS, It is due to the taxpayers of the State of Ohio to obtain from the canals and inland waterways under the control of said State, the greatest amount of revenue compatible with their most efficient use, which can only be done by affording merchants, manufacturers and shippers more rapid and economical transportation thereon for their products; and,

WHEREAS, As a motive power on land, it has been demonstrated that electricity, because of its cheapness and practicability, is eminently successful, and it is believed that the same results can be accomplished on water, and that efforts to that end should be speedily made, provided the same is done without any expense to the State, therefore, etc."

In respect to this act a permit has been drafted granting to Mr. W. G. Wagenhals, of Ohio, an electrician of note, the right to make such experiments on the Miami and Erie canal, which has been fully approved by your Board, and is now in the hands of His Excellency, the Governor, and the Attorney General for their consideration.

It is to be hoped that nothing will interfere with making the law actually operative, for it cannot help but adduce to the great benefit of the canal and to the people of the State.

CONSTRUCTION OF CANALS AND STATE'S OWNERSHIP IN CANAL LANDS, AND RULES DEFINING SAME.

Particularly since the act of March 28, 1888, providing for a canal commission to establish the boundaries and the lines of the canals, canal basins and reservoirs of the State, many pertinent inquiries have been made, and continue to be made, by citizens of the State and their attorneys as to what constitutes the State's ownership in these lands, and the rights to property of the abutting owners, which are of such moment that I deem it important to define in this report such rights and ownership, as nearly as possible.

I am pleased to say that the following statement, embodying the result of a careful investigation of the subject is fully concurred in by the canal commission as now constituted, and can, I think, be relied upon as accurate, and fully supported by the surveys, the records of this office, and the decisions of the courts relating to the subject.

The canals of the State were originally constructed with a minimum width of 40 feet at top water line, and a bottom width of 26 feet, exceptions being made in the construction of the Wabash and Erie canal from the State line to Toledo, which was made 60 feet wide minimum at top water line, and 46 feet wide at the bottom; and in the Miami and Erie canal from Dayton to the town of Junction, where it joins the Wabash and Erie, a short distance west of Defiance, which had a minimum width of 50 feet at top water line, and 26 feet at bottom.

The specifications for constructing the embankments of the canals were uniform, except in the case of the Hocking canal, where the top surface of the towing path and berme embankments were made level instead of dropping down on their outer margins nine and six inches respectively.

ORIGINAL SPECIFICATIONS,

Adopted for the construction of the canals in 1825, a copy of which was filed by the Board of Canal Commissioners with the annual report to the General Assembly of Ohio, dated January 22, 1833.

Dimensions of the Canals.—"The canal shall be at least 26 feet wide at botton, and 40 feet wide at top water line, unless from the peculiar difficulties of particular situations it shall be deemed expedient by the acting commissioner or engineer having direction of the work, to diminish the breadth. In all cases where the canal is formed by the construction of a single bank near the base of a hill or natural bank, and also when the excavation to the depth and breadth above required, is not sufficient to raise the banks to the necessary height, the depth and breadth of the canal shall be increased beyond the limits above prescribed, to such extent as the acting commissioner or superintending engineer shall deem expedient, provided, the cost of the canal shall not be materially increased, nor the safety of the canal materially diminished thereby."

Embankments and Excavations.—"The towing path bank shall be at least 10 feet broad at the top, and the opposite bank not less than six feet. When either bank is raised above the natural surface of the earth both the inner and outer slope thereof shall have a horizontal base of one foot nine inches for every foot in perpendicular height, unless otherwise directed by the acting commissioner or engineer having charge of the work; and if so directed, the contractor shall form the banks with such slope as may be prescribed by said commissioner or engineer. The surface of the towing path bank shall be nine inches higher on the side next to the canal than on the other side, and the opposite bank six inches higher on the side next to the canal, in all cases when there is not a spoil bank in the rear of said banks and when the natural surface is not above the bank. But when a spoil bank or the natural surface of the earth is higher than the towing path or opposite bank, each of said banks shall in such case be so constructed as to be at least one foot higher at the face than at the back side. Both banks shall be so constructed as to remain at least two feet above top water line after they shall become solid and well settled, except in such places as the acting commissioner or engineer having charge of the work may direct the bank to be left lower in order to serve as a waste weir or place for the escape of flood waters; and in such cases the contractor shall reduce or leave the bank at the height so required. Whenever the natural surface of the earth under the center of the bank is at or below the level of the bottom of the canal, the bank shall be made so as to remain at least two and a half feet above the top water line, and when the natural surface of the earth under the center of the bank is three feet or more below the bottom of canal, such bank shall be raised so as to remain at least three feet above top water line after having settled so as to become compact and substantial. The banks shall be raised to the height prescribed by the acting commissioner or engineer having charge of the work in all cases where it may be deemed necessary to secure the canal from the floods of adjacent rivers or streams."

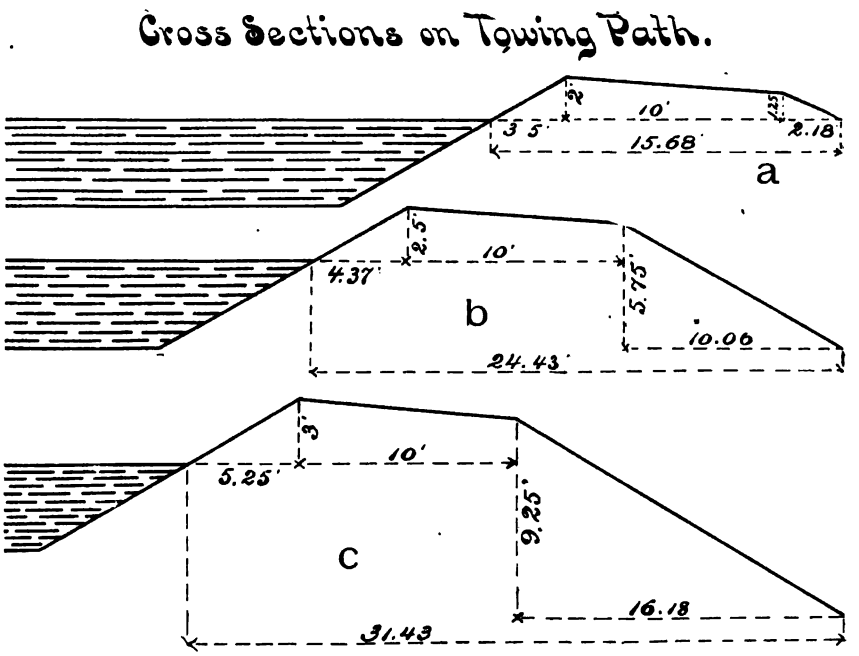
As evidence that it was not the intention of the State to restrict the canals to a given uniform width, or that the ownership of the State in its canal lands should not exceed any certain given limit, I submit a portion of the Canal Commissioner's report to the General Assembly of 1832, signed by Benjamin Tappan and Alfred Kelly, original members of the commission, who served the State continuously up to and after the date of the report, which shows that the minimum width as mentioned in the

specifications was the exception in the actual construction of the canals rather than the rule, to-wit:

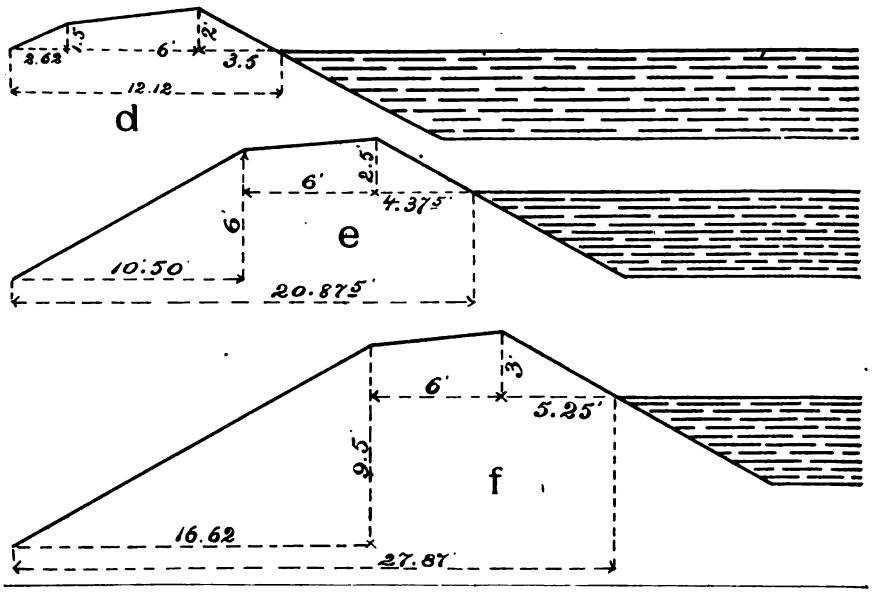
"The main trunks of the Ohio and Miami canals have each a minimum breadth of 40 feet at the water line, and 26 feet at bottom with 4 feet depth of water. A large proportion of both, particularly of the Ohio canal, is of much larger dimensions, having a breadth at the water line varying from 60 to 150 feet, and a depth of from 5 to 12 feet. In many places it even exceeds, for considerable distances, these dimensions, both in breadth and depth. It has been a standing rule in the construction of the canals to increase their dimensions beyond the minimum, in all places where it could be done without materially enhancing the cost."

The construction of wide waters formed a very important adjunct to the practical, operations of the canals, as they served necessary purposes as pools and reservoirs for the storage of feed water. By force of economy rather than design, a towing path embankment alone was formed, and the water was allowed to flow to the foot-hills on the opposite side of the canal, in some cases several hundred feet, the fee of the land thus occupied being vested in the State whether a claim for compensation or damages for the same was made or not. The State at the same time owned in fee a minimum berme bank around all such basins for the reason that in some cases, without such protection, the canals might easily be drained by opening sluice ways connecting these wide waters with the natural drainage of the adjacent lands.

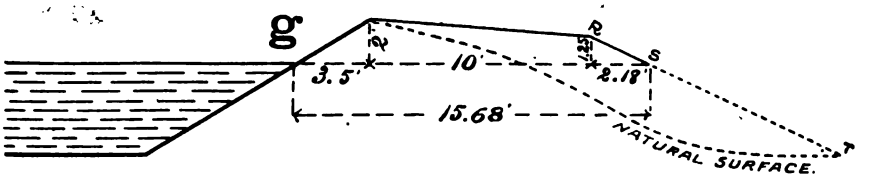
In order that the original purposes of the construction of the Ohio canals may be more readily understood, I beg to submit the following diagrams by way of explanation:



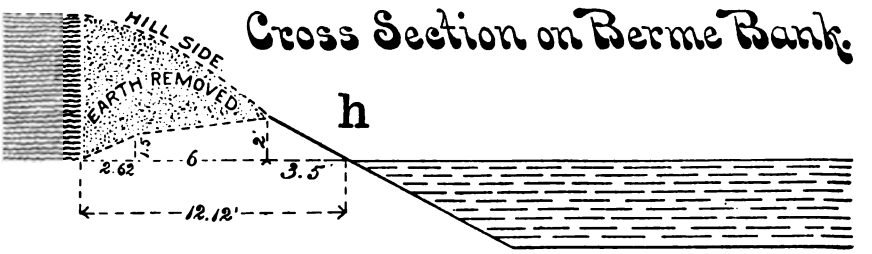
Cross Sections on Berme Bank.



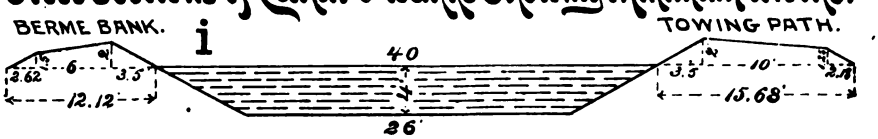
Cross Section on Towing Path.



Cross Section on Berme Bank.



Cross Sections of Canal & Banks Showing Minimum Widths.



The cross section marked "a" represents the minimum towing path embankment when the surface of the adjoining land is on a level with the top water line of the canal; the width of the embankment is 15.68 feet. If the surface of the ground had sloped down away from the canal, it is evident that the outer slope would necessarily have been extended at the proper angle till it intersected the natural surface of the ground, and would, therefore, have increased the width of the embankment in proportion to the fall of the ground. (See cross section "g.")

The cross section marked "b" represents the towing path embankment when the natural surface of the earth under the embankment is at or below the level of the bottom of the canal. The width of this cross section is 24.43 feet, which will be increased in case the natural surface of the ground drops down below the level of the bottom of the canal, and the line corresponding to "R S" in the cross section marked "g" must be produced to intersect the natural surface of the ground at "T."

The cross section marked "c" represents the towing path embankment when the center of the bank is three feet or more below the bottom of the canal. The width of such an embankment is 31.43 feet, which will be increased the same as "a" and "b" when the natural surface of the ground falls below the surface under the center of the bank.

The cross sections marked "d" "e" and "f" represent standard types of berme embankments, and are constructed under the same specifications as the towing path embankments, with the exception that the top of the berme embankment is only six feet wide, instead of 10 as in the towing path embankment, and the surface of the top of the berme embankment on the side next to the canal is six inches higher than the outer margin of the top of the berme, instead of nine inches as compared with the towing path embankment.

The fundamental principles involved are, that the natural surface of the adjoining land, as compared with the top water line or the bottom of the canal, determines the height of the embankments, and that both the inner and outer slopes of the embankments must be so constructed as to have a horizontal base of one foot nine inches for each foot in perpendicular height. This applies to all canal and reservoir embankments.

The cross section marked "g" illustrates the mode of constructing either towing path or berme embankments when the natural surface of the ground under the center of the embankment falls below the top water line.

The dotted curved line may be supposed to represent any slope of the natural surface, in which case the outer slope represented by the line "R S" must be extended so as to intersect with the natural surface at "T," and it is worthy of remark that the State owns the land in fee simple under all artificial embankments, including spoil banks, to the foot of the outer slope as originally constructed.

The cross section marked "h" represents the canal when constructed along a hill side or natural elevation, an artificial embankment being constructed on the opposite side of the canal. This arrangement accounts for the numerous wide waters and natural basins that are found along all the canals, and necessarily extends the State's ownership 12.12 feet from the water line as figured by cross section, as the State must own sufficient land to protect the canal, for if the adjacent land owner should retain the fee to the water line, he would have the right to cut away the embankment and even to excavate the same in a manner that would effectually destroy the usefulness of the canal. It sometimes happens that the natural embankment is composed of gravel and furnishes desirable material for dressing the towing path; the dotted portion of the

cross section represents the portion of the natural embankment that is removed in such cases, leaving the minimum berme embankment, such as would have been constructed if the surface of the adjacent land had been on a level with the top water line. In this connection the Supreme Court of the State has held that in the absence of a statute or proof to the contrary, the appropriation of land for the purposes of a canal will be presumed to have included land for a berme bank (see 18th Ohio State, page 92).

There is one class of embankments not shown in the diagrams. It is where the natural banks are high and steep, which required the sloping of the embankment back a considerable distance beyond the limits of the minimum embankment. This gave the owner of the land a legitimate claim for damages and therefore vested the fee in the State, whether the owner did or did not make a claim for damages.

In concluding the discussion of this subject, I deem it not out of place to say that the State's title and holding in the lands occupied by the canals and their embankments must be in absolute fee ownership, as the law under which the canals were built and the recent decisions of the courts in relation thereto, will show.

I take the liberty of quoting the eighth section of the law of 1825 and portions of the decisions of the Supreme Court of our State, and of the Circuit Court of the Northern District of Ohio, in substantiation of these findings, sustaining the State's title to the land occupied by the canals and their actual and necessary embankments:

LAWS.

The eighth section of the act passed by the General Assembly of the State of Ohio, on February 4, 1825, entitled "An act to provide for the internal improvement of the State of Ohio by navigable canals" (see general laws of Ohio, vol. 23, pp. 56 and 57), provided among other things:

SECTION 8. "That it shall and may be lawful for the said canal commissioners, and each of them by themselves, and by any and every superintendent, agent and engineer employed by them, to enter upon, and take possession of, and use all and singular any lands, waters, streams and materials necessary for the prosecution of the improvements intended by this act; and to make all such canals, feeders, dykes, locks, dams, and other works and devices as they may think proper for making said improvements; doing, nevertheless, no unnecessary damage; and that in case any lands, waters, streams or materials taken and appropriated for any of the purposes aforesaid, shall not be given or granted to this state, it shall be the duty of the canal commissioners, on application being made to them by the owner or owners of any such lands, waters, streams or materials, to appoint by writing not less than three nor more than five discreet, disinterested persons as appraisers, who shall, before they enter upon the duties of their appointment, severally take an oath or affirmation, before some person authorized to administer oaths, faithfully and impartially to perform the trust and duties required of them by this act, a certificate of which oath or affirmation shall be filed with the secretary of the canal commissioners; and it shall be the duty of said appraisers, or a majority of them, to make a just and equitable estimate and appraisal of the loss or damage, if any, over and above the benefit and advantage to the respective owners and proprietors, or parties interested in the premises so required as aforesaid, and the said appraisers, or a majority of them, shall make regular entries of their determination and appraisal, with an apt and sufficient description of the several premises appropriated for the purposes aforesaid, in a book or books to be provided and kept by the canal commissioners, and certify and sign their names to such entries and appraisal, and in like manner certify their determination as to those several premises which will suffer no damages, or will be benefited more than injured by, or in consequence of the works aforesaid, and the canal commissioners shall pay the damages so to be assessed and appraised, and the fee simple

of the premises so appropriated shall be vested in this state. Provided, however, that all such applications to the board of canal commissioners, for compensation for any lands, waters, streams or materials so appropriated, shall be made within one year after such lands, waters, streams or materials shall have been taken possession of by the said commissioners, for the purposes aforesaid."

DECISIONS.

(Supreme Court of Ohio.)

Ohio ex rel. v. The P., C., C. & St. L. Ry. Co.

Syllabus.

3. By force of the provision of section 8 of the act to provide for the "internal improvement of the State of Ohio by navigable canals," 23 O. L., 57, whenever the State actually occupied a parcel of land for canal purposes, a fee simple title thereto at once and by virtue alone, of such occupancy, vested in the State.

"Statutes of limitation do not run against the State unless the intention that they should so run is obvious.

"That the title of the State to its canal lands is one in fee simple, is a question of law. The only fact to be ascertained is whether the lands were, in fact, a portion of the canal system. How the acquisition was made is not material. The mere seizure and appropriation of a parcel of land for canal purposes, by force of the statute under which our canals were constructed, was alone sufficient to vest in the State a fee simple title to them. Nor could any other title than one in fee simple be received by the State for lands to be devoted to a canal. A mere occupation of lands by the State for canal purposes was a seizure and appropriation of it to that purpose, and to be devoted to that purpose was to give to the State a fee simple title thereto. No conveyance was necessary; the seizure and occupation transferred to the State the entire estate in the lands so seized and occupied, leaving to the former owner simply a claim for compensation. 23 O. L., 56 (*Sec.* 8); Malone v. Toledo, 28 Ohio St., 643; Malone v. Toledo, 34 Ohio St., 541.

In the Circuit Court of the United States for the Northern District of Ohio.
Eastern Division.

Isaac L. Hewitt vs. The Valley Railway Co.

Welker, *Judge*, and a Jury.

Charge of the Court.

* * * "To make an appropriation it was only necessary that the canal commissioners or their employes under them and under their direction, should enter upon and take possession of and use the lands, or such lands, as they thought proper, for making a canal for the purposes of affording a public water highway for navigation purposes; and the State's title did not depend upon the payment of any damages which the commissioners, appointed by the statute, might award the owner. The title passed as well without the payment of the damages assessed as after the payment had been made." * * * * *

MAPS AND PROFILE.

To meet the demand that is made for ready reference to the canal system of the State, I beg to submit herewit a (skeleton) map of the State of Ohio showing existing, abandoned and proposed canal routes, with their feeders as nearly as possible, and the lands granted by the United States to the State of Ohio for canal purposes; also a profile map showing elevations of levels from tide water, Lake Erie and the Ohio river, giving stations, distances and information of a general character, and would recommend that they be published in this report.

The law creating the canal commission requires that the maps and plats made under their direction shall be made in conformity to instructions prepared by the chief engineer of public works, and when completed shall be approved by him and said commission by indorsement signed by them respectively. Up to the present time 311 permanent plats have been thus indorsed, 264 of which have been substantially bound in 18 massive volumes, thus making a permanent record of the State's property which can not be easily lost or misplaced.

All of the plats intended for permanent record will eventually be bound in similar manner.

I take pleasure in saying that in the interpretation of the field notes, and in the delineation of the same, these maps are models of neatness and accuracy, and reflect credit alike upon the commission and the draughtsman who have executed this part of the work.

SUBDIVISION REPORTS.

For a description of new work and repairs made during the fiscal year, reference is hereby made to the following summary for each of the subdivisions, with recommendations for betterment and maintenance, giving the name of each superintendent of repairs and section and dredge foreman, with postoffice address and the time of service of each in the capacity designated, with such other information in relation to the questions affecting the department as is deemed of interest. In this regard I take great pleasure in calling your special attention to the carefully prepared annual report of each of your superintendents of repairs, on file in this office, showing the conditions and operations of their several subdivisions.

ANNUAL REPORT OF THE REPAIRS

Made on subdivision No. one (1), division No. one (1), Ohio canal, during the year ending November 15, 1898 by superintendent of repairs,

W. M. HILTABIDLE.

Charles Hatch, foreman of repairs, Peninsula, O, 13 years' service.

James Roach, foreman of repairs and dredge, Akron, O., 23 years' service.

John Moore, foreman of repairs, Navarre, O., 13 years' service.

This subdivision extends from Wild Cat basin to Cleveland, O., a distance of seventy-six (76) miles. There are three (3) repair boats and three (3) teams, one steam dredge besides numerous tools and appliances, an inventory of which is on file in this office; all of which is State property.

LOCKS.

The walls of the following locks were repaired: the Feeder lock at Peninsula, Deep lock at Peninsula, Lower lock at Yellow Creek, locks 1, 2, 3, 6, 12, 13, 14, 17, 20 and the lock at Fulton. The floors in the bottom of all locks were repaired and mitre-sills were placed in the Seventeen Mile lock.

LOCK GATES.

Four pairs of new lock gates were placed in position, seven (7) heel posts were spliced, chafing planks were placed on all gates on this subdivision, all old valve stops were removed and new ones placed in position and fourteen (14) new snubbing posts were set in place.

CANAL BANKS.

About five (5) miles of towing path and two (2) miles of berme bank were raised to an average height of 18 inches.

Twenty-four (24) breaks in the towing path and five (5) breaks in the berme bank caused by the floods of last spring were repaired and the bars removed.

CULVERTS.

The following culverts were repaired: Culvert at C., C. & S. Ry. bridge near Cleveland, culvert below the Eight (8) Mile lock, culvert near the mouth of the Fulton feeder and the culverts on the Ten (10) Mile level.

AQUEDUCTS.

The aqueduct over the Cuyahoga river at Peninsula received new trunk lining on bottom and part of the sides, also four (4) new needle beams, eight (8) now rods, new ends to center pier and new end to south abutment and the remaining masonry was repaired. The entire repairs costing about $1,700.

Johnny Cake and Wolf Creek aqueducts also received needed repairs, and all culverts on this subdivision were cleaned three (3) times.

WASTE WEIRS.

Twenty-two (22) waste weirs on this subdivision were repaired.

WASTE GATES.

New waste gates, with racks and pinions, were placed in position as follows:

On Long Pinery level, one (1) gate complete.

At the foot of Pinery level, one (1) gate complete.

At the head of Pinery level, one (1) gate complete.

At Peninsula, one (1) gate complete.

At Mile Post of Pinery feeder, one (1) gate complete.

At Cemetery Run, Pinery feeder, one (1) gate complete.

At Beaver Run, Pinery feeder, two (2) gates complete.

BOATS REPAIRED.

State repair boats numbers one (1) and three (3) were each repaired, and hand dredges numbers one (1) and two (2) were repaired.

DREDGING.

There were seventy-eight (78) bars that were removed by the use of the hand dredge.

Eighteen (18) bars were removed by using wheelbarrows.

The following locks were freed from sediment and debris: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20 and 21, at Yellow Creek, Portage, Lower Johnny Cake lock, Peninsula deep lock, Peninsula lock, lower Boston, lower lock, Seventeen Mile lock, Massillon lower lock and Navarre lock.

Bars were removed by washing them out, as follows: Paper Mill bar, near Cleveland, twice; bar 600 feet long in Peninsula level, once; bar below Portage lock, four times; at the New Sluice on Portage level, four times; bar above Portage lock, twice; bar above feeder above lock No. 21, four times; bar below lock No. 16, four times; bar at Cemetery Run, five times; bar at Beaver Run, four times, and all locks and levels were washed clean from lock No. 3 to lock No. 17.

CATCH BASINS.

All catch basins on this subdivision were cleaned and kept in good order.

DOCKS.

All docks on this subdivision were kept in good repair.

BRIDGES.

New bridges were built as follows: At the Eight Mile aqueduct, at Goose Pond waste weir, at the Peninsula aqueduct, at lock No 16 feeder, at lock No. seven (7) waste weir, over lock No. 3, and at lock No. one (1); and all other bridges received needed repairs.

DAMS.

The dam at Pinery feeder was repaired with stone and gravel, as were also the dams at lock No. 21 feeder, Summit feeder, Tuscarawas feeder, also the Fulton and Millport feeder dams.

WEEDS AND BRUSH CUT.

The weeds and brush were cut along the towing path the entire length of this subdivision, and in addition about six (6) miles of berme bank freed from brush.

GRASS CUT.

The water grass was cut twice during the past summer from the channel of the canal on all levels from lock No. one (1) to Wild Cat basin.

MISCELLANEOUS REPAIRS.

A ditch was dug along the roadway a distance of 200 feet, in order that the sand brought in by rains should be carried to a point in the canal near the sluice at the Paper Mill bar.

The bank of the Cuyahoga river below the Pumping Station was repaired by using stone rip rap. The towing path on the level above Red lock was strengthened with the addition of earth.

Twelve (12) sunken boats were raised during the past season.

A new sluice was placed above lock No. 7.

REPAIRS NEEDED.

Twelve (12) pairs of new lock gates.

Forty (40) new balance beams.

Twenty (20) new snubbing posts.

One (1) new steam dredge.

Thirty (30) miles of channel dredged.

A new wing wall should be built at lock No. five (5) and another at Wallace lock.

The following culverts should be rebuilt:

The one below the Eight (8) Mile lock.

The one at C., C. & S. Ry. bridge.

The one near Boston.

The one at Fulton feeder and the two (2) culverts south of the Fulton lock.

The masonry at the Eight (8) Mile aqueduct should be repaired, and the north span of the Peninsula aqueduct should be rebuilt.

There are several miles of very low towing path on this subdivision that should be raised by dredging or otherwise.

ANNUAL REPORT OF THE REPAIRS

Made on subdivision No. two (2), division No. one (1), Ohio canal, during the year ending November 15, 1898, by superintendent of repairs,

CHARLES H. GEIDEL.

L. P. Wilson, foreman of repair boat No. one (1), Newcomerstown, O., 13 years' service.

Alfred Shoman, foreman of repair boat No. 2, and engineer of dredge No. 6, Roscoe, O., 7 years' service.

There are on this subdivision two (2) repair boats, one (1) steam dredge, one (1) span of horses and one (1) span of mules, besides an outfit of numerous tools and appliances, an inventory of which is on file in this office; all of which is State property.

AQUEDUCTS BUILT AND REPAIRED.

The Bolivar aqueduct of three (3) spans of fifty-seven (57) feet each, was built anew, including two (2) new piers, and abutments repaired at a cost of $4,498.14.

Navigation was suspended from July 22 to September 15, during the period of construction.

The Dresden aqueduct having been injured and moved by the spring floods, was placed in position and repaired.

The north abutment of the Roscoe aqueduct was repaired with cement.

The south abutment of the Orange aqueduct was rebuilt.

BRUSH CUT.

Owing to the pressure of other work, only seven (7) miles of canal banks were freed from brush.

BANKS RAISED.

From the Canal Dover level to the level of the canal at Lewisville, inclusive, there were four thousand two hundred and ninety (4,290) lineal feet of canal banks raised during the past season.

BARS REMOVED.

There were removed from the canal boating channel on this subdivision during the past season, thirty-nine (39) bars, aggregating 5,533 cubic yards of earthy sediment.

BRIDGES.

A new towing bridge was built at the mouth of the Zoar feeder, one each at the Bolivar and Orange aqueducts, and one at the Roscoe waste weir.

FEED GATES.

New feed gates, including a new frame, were placed in position at the head of the Trenton feeder, and the feed gates at Canal Dover Guard lock were repaired.

WASTE GATES.

Two new gates at Roscoe and one new gate on the Dresden level were placed in position.

BREAKS REPAIRED.

During the past season there were twenty-nine (29) breaks on this subdivision repaired, aggregating thirty-seven thousand three hundred and thirty-seven (37,337) cubic yards.

CULVERTS.

Sixteen (16) feet of the end of the twenty (20) foot arch culvert at Blicktown having been washed out during the floods of March, was rebuilt.

Ten feet of the arch, the two (2) wing walls and foundation (these parts of the culvert at White Eyes having been destroyed by the flood in September) were rebuilt.

Debris and drift was removed from the following culverts located at Adams Mills, Wilson, Coalport, Roscoe, Lewisville, Newcomerstown, Port Washington, White Eyes, Glasgow and Trenton.

DAMS.

The Sugar Creek dam and the Walhonding dam, each received needed repairs, including a stone abutment to the latter on the west side of the river.

LOCKS.

Locks numbered 7, 8, 9, 11, 12, 14, 15, 18, 19, 20, 21, 22, and 23, south of Portage Summit, on this subdivision, and the locks at Roscoe, on the Walhonding canal, received repairs.

WASTE WEIRS.

The high water waste weir on the Canal Dover level, the waste weirs at Sugar Creek, Port Washington, Newcomerstown and Roscoe were each repaired, and waste weir on the Walhonding feeder was rebuilt.

STONE PROTECTION.

The quantity of stone used to protect the canal bank below Newcomerstown, Roscoe basin, Walhonding feeder, and for refilling the abutment at the Six Mile dam on the Walhonding river, was seven hundred and thirty-five (735) cubic yards.

CATCH BASINS.

Every catch basin on this subdivision has been cleaned, each not less than two and some three times during the past season.

REPAIRS NEEDED.

The walls of the Canal Dover Guard lock should be rebuilt, and new gates placed in the same.

The walls of lock No. 12 should be rebuilt and one pair of new gates placed in the same.

Locks numbers 11, 14 and 17 each need one pair of new gates and new balance beams.

The Guard lock at Trenton needs one (1) new gate.

The sluce gates on Bolivar and Sugar Creek levels should be rebuilt, and new ones put in on the Six (6) Mile and Two (2) Mile levels above Canal Dover. Also one on the Roscoe level at Conesville, and one at Adams Mills.

The bridge at Sugar Creek dam should be rebuilt.

A new aqueduct and towing bridge should be built at Dresden, the old one being in a dangerous condition.

Repair boat No. 2 should be repaired at once. A new repair boat is also needed.

Since my last report dredge No. 6 has become unservicable by reason of the decay of the hull. I would recommend the building of a new hull on which to place the boiler and engine, and the purchase of a centrifugal pump for removing sand bars.

There should be new piling placed at the crossing of Sugar creek, to take the place of those destroyed by ice, to protect the towing bridge.

MISCELLANEOUS.

On account of the damage to the canal banks by the spring floods, and on account of the construction of the Bolivar aqueduct boating was delayed, since which time the business on the canal has been good, and boats carrying from 85 to 90 tons of coal and from 2,500 to 2,700 bushels of grain and from 53,000 to 55,000 feet of lumber from Cleveland to Roscoe have been running.

ANNUAL REPORT OF THE REPAIRS

Made on subdivision No. three (3), division No. two (2), Ohio canal, during the year ending November 15, 1898, by superintendent of repairs,

F. C. DIETZ.

S. M. Brown, foreman of repairs, Newark, O., 1 year's service.

Alex. Richardson, foreman of repairs, Carroll, O., 18 years' service.

There are on this subdivision two (2) repair boats and one (1) horse, belonging to the State besides numerous tools and appliances, an inventory of which is on file in this office.

LOCKS AND LOCK GATES REPAIRED.

The locks at Lockbourne, Groveport, Lockville, Carroll, Baltimore, the North Out-Let lock at the Licking reservoir. Taylor's locks and the locks at Newark received repairs and were cleaned free from debris where needed.

CANAL BANKS.

Repairs were made to the canal banks in such places as were needed from Lockbourne to Licking reservoir.

Repairs were made to the banks of the Kirkersville feeder above the waste gates at Gillespies and in some places the banks were raised and made thicker and bars were removed from the channel in a few places where needed.

AQUEDUCTS.

The aqueducts north of the reservoir have received some slight but insufficient repairs.

Since the last annual report was made the acqueduct over the north fork of Licking creek has been washed out by the floods of last spring.

CULVERTS.

The culvert at Sharp's Landing south of Groveport has been repaired during the past season.

The culvert on the Four (4) Mile level at Canal Winchester has been freed from debris.

WASTE WEIRS.

A new weir was permitted to be constructed at the east of the Twin City Paper Company allowing the water in time of flood to pass from Paw Paw Run into the canal at Baltimore to prevent injury to the machinery of the paper mill.

DOCKS.

A dry dock has been arranged at Carroll where the State repair boat can be repaired.

WASTE GATES.

The waste gates at the Licking reservoir have been put in complete repair throughout.

MISCELLANEOUS REPAIRS.

The old house at Lockville formerly used by the lock tender but not now in use was torn down and rebuilt on the berme bank of the canal in Carroll for a tool house.

Weeds, grass and brush have been cut from the banks of the canal from Newark to the Licking reservoir, and from there to Lockbourne, also along both the North and South feeders.

REPAIRS REQUIRED.

The necessary repairs on this subdivision of the canal and the estimated costs are as follows:

LOCKS.

The repair of lock walls, gates, beams, floors, valves and tumbles will require an outlay of	$7,300 00
Canal banks	900 00

AQUEDUCTS.

The aqueduct over south fork of Licking creek	263 00
Lake run aqueduct	322 00
Raccoon creek aqueduct	945 00
Rebuilding aqueduct over the north fork of Licking creek including new piers	4,363 00

EXCAVATION.

This includes bars washed into the canal and deepening the canal at the deep cuts at Millersport and Nashport to standard depth	10,600 00

DAMS.

To construct a good dam on the north fork of Licking creek and put the feeder in good repair will require an outlay of	1,730 00
The feeder dam on Paw Paw Run at Baltimore and repairing the feeder	300 00
Total estimated cost	$26,700 00

ANNUAL REPORT OF THE REPAIRS

Made on subdivision No. 4, division No. 2, Ohio canal, during the year ending November 15, 1898, by superintendent of repairs,

GEORGE H. WATKINS.

W. H. Kirkendall, foreman repair boat No. 1, Circleville, O., 12 years' service.

Thos. J. Guin, foreman repair boat No. 2, Chillicothe, O., 16 years' service.

C. T. Watkins, foreman repair boat No. 3, Waverly, O., 14 years' service.

There are on this subdivision three (3) repair boats, one (1) steam dredge and tender or boarding boat, three (3) spans of mules, one (1) steam pump, one (1) engine and pile driver, and numerous tools and appliances, an inventory of which is on file in this office; all of which is State property.

AQUEDUCTS.

The aqueducts at Circleville, Yellow Bud, Paint Creek, Stony Creek and Sharonville were each repaired as found necessary.

CULVERTS.

The culvert known as the Three Mile culvert was repaired, and the leaks in it stopped.

The culverts at Linton's, Wiggins' and Hedges' above Millport, Gander Hook, Dry Run and Joe Morgan's were each cleaned free of drift and bebris.

BRUSH AND WEEDS.

Brush and weeds were cut from the canal towing path the entire length of the subdivision.

GRASS.

The water grass and moss that grows in the lower end of the Ohio canal was cut out a distance of fifty (50) miles by foreman C. T. Watkins.

CANAL BANKS REPAIRED.

The floods of March last exceeded in height in the Scioto river at Columbus and points southwardly any heretofore known, or of which there is any record, doing much damage to the canal banks as far south as Jasper, decreasing in damage at the latter point.

There were breaks in the canal banks requiring forty-four thousand four hundred and eighty (44,480) cubic yards to restore the banks, eleven thousand (11,000) cubic yards of which were on the Columbus feeder of the Ohio canal.

BARS REMOVED.

The flood above mentioned carried into the Columbus feeder and the Ohio canal three thousand seven hundred and thirty-four (3,734) cubic yards, of which two thousand two hundred and thirty-three (2,233) cubic yards were in the Columbus feeder, all of which was removed from the canal and the feeder.

TOWING BRIDGES.

New towing bridges were built at Lockbourne, Camp Creek, and a new change bridge was constructed at Powder Mill lock.

DAMS.

The surface filling of gravel on the Columbus dam was replaced three (3) times.

The dam at Lockbourne was put in good repair, as were the dams at Millport and Circleville and Tomlinson's dam at Three locks below Chillicothe.

LOCKS.

Nine (9) locks were cleaned. The walls of two (2) locks were repaired, five (5) gates were repaired, six (6) gates were renewed, one (1) mitre-sill was replaced at Lumbeck and four (4) new balance beams were placed in position.

In addition to the above the Guard lock at the head of the Columbus feeder, having been damaged considerably by the high water, was fully repaired and restored to use.

DREDGING.

The level of the canal at Circleville was dredged to a depth of five (5) feet, thirty (30) feet wide and fifteen hundred (1,500) feet in length.

The level below the Circleville feeder was dredged from the C. & M. V. Ry. bridge southwardly one mile.

FLOOD GATE.

A flood gate to prevent the breaking of the canal bank in time of high water has been constructed in the village of Lockbourne, in accordance with the provisions of Senate Bill No. 76, passed by the 73d General Assembly.

REPAIRS REQUIRED.

LOCK GATES.

One (1) pair of gates are needed at each of the following places:

Lockbourne guard lock, Millport guard lock, Marfield lock, Fourth and Fifth street locks in Chillicothe.

Four pairs of new gates are needed at Lumbeck's upper lock.

Four pairs of new gates are needed at Three locks.

Two pairs of new gates and a new platform are needed at Guard lock on the Five (5) Mile level.

The walls of both of the Pee Pee locks need repairing.

Two (2) new pairs are needed at the Waverly, upper and lower Pee Pee locks.

Four pairs of new gates at the Eighteen (18) Mile lock and Hurdths lock.

Six pairs of new gates are needed at the locks at Union mills.

One mitre-sill is needed at the Eighteen (18) Mile lock.

DAMS.

The dams at Millport and Three locks—(Tomlinson's dam) will require some repairs the coming season.

REPAIR BOATS.

Repair boat No. one (1) needs an entire new set of floor timbers.

AQUEDUCTS.

The aqueduct across Paint creek needs three (3) new chords. The aqueduct near Sharonville needs one (1) new chord and a set of new braces.

Two spans of the aqueduct at Waverly need repairing, the aqueduct across Sunfish creek needs general repairing and the Camp creek aqueduct needs two (2) new spans.

WASTE GATES.

One new waste gate is needed at Harness's bridge.

TUMBLE WAYS.

New tumble way is needed at the lower Pee Pee lock.

STONE PROTECTION.

Stone rip rap protection is needed at the Columbus Guard lock, on the Circleville feeder and on the Five (5) Mile level.

ANNUAL REPORT OF THE REPAIRS

Made on subdivision No. one (1), grand division No. 3, Miami and Erie canal during the year ending November 15, 1898, by superintendent of repairs,

CHARLES T. HAYMAN.

This subdivision extends from Cincinnati to the first lock below Carrollton a distance of fifty-seven (57) miles, having been extended five (5) miles on May 10, 1898.

R. V. Denny, foreman of carpenters, Middletown, O., 37 years' service.

Wash Irwin, foreman State boat No. 1, Cincinnati, O., 37 years' service.

Henry F. Eyler, foreman State boat No. 2, Hamilton, O., 1 year's service.

William Sheedy, foreman dredge No. 6, Franklin, O., 16 years' service.

There are on this subdivision two (2) State repair boats, one (1) steam dredge and one (1) tender or boarding boat and four (4) mules, besides numerous tools and appliances, an inventory of which is on file in this office; all of which is State property.

LOCKS.

The walls of the lock near the flouring mill in Lockland were partly rebuilt, and a new floor put in the lock.

The three (3) locks at Lockland were cleaned free of sediment.

The locks at Crescentville and Amanda and the walls of the feeder lock above Middletown were repaired.

CANAL BANKS.

Considerable work has been done in raising the canal banks between Cincinnati and Hamilton; this was especially needful between Cincinnati and Lockland, and required nearly the entire time of the crew of State boat No. one (1).

The canal banks between Franklin and Miamisburg are quite high, having been raised by depositing on them the bars removed from the canal during the past season.

LOCK GATES.

A new balance beam was placed on the lower gates at Miamisburg; the lock gates at Sunfish lock were repaired.

The gates of lock at the head of the Greenland level were repaired, and new gates were put in the lock at Amanda.

AQUEDUCTS.

The towing bridges of the Lockland and Amanda aqueducts and the Amanda and Fairfield aqueducts each received repairs; a new aqueduct has been framed for the latter place.

CULVERTS.

The culvert at Willow Patch (above Lockland) and the culvert on the Eight (8) Mile level (below Hamilton) were repaired, and the culvert at Holweger's above Franklin was cleaned free from debris twice during the season.

WASTE WEIR.

The waste weir at Rialto having been washed out was rebuilt. The waste weir on the Franklin level received repairs. The waste weir above Hamilton was repaired.

WASTE GATES.

The waste gates below Hamilton were repaired.

REPAIR BOATS.

State repair Boat No. 1 was repaired during the past season.

DREDGING.

There was 28,235 lineal feet of canal dredged on this subdivision during the past season.

The machinery of dredge No. 6 needs general repairing. A new flat boat was built for this dredge.

CATCH BASINS.

Every catch basin on this subdivision has been cleaned during the past season; some of them seven and eight times.

Five (5) new catch basins were built on the Miamisburg level, three (3) on the Franklin level, three (3) rebuilt on the Miamisburg level and five (5) on the Franklin level and seven on the Franklin level were built higher.

DOCKS.

The canal banks in Cincinnati have been repaired by revetting them from Sycamore to Fifteenth street, and considerable repairs of the same kind have been made at various places on this subdivision.

WEEDS AND BRUSH.

Weeds and brush have been cut from the canal banks the entire length of the subdivision, the former twice.

MASONRY.

The masonry and head gates at the mouth of the feeder above Middletown, and the rear and west side wall of collector's office in Cincinnati were rebuilt.

LOCK HOUSES.

The lock houses at Franklin, Middletown and Rockdale were repaired.

BRIDGES.

The Carthage bridge was raised and the necessary paving added to it. New towing bridges were built at the upper Lockland basin, and at the mouth of the Middletown feeder, and the change bridge at Twelfth street, Cincinnati, was repaired.

CANAL AND FEEDER BANKS.

The floods of last spring broke the banks of the Middletown feeder, the canal bank at Titus bridge above Middletown, at Main street in Middletown, at the Middletown lock above Amanda, above Rockdale and at Woodsdale Park, all of which were refilled.

MISCELLANEOUS.

A new flat boat was built for service at the Middletown dam.

New wings were built to the abutments at the Middletown dam. Considerable fencing was built to confine the dredgings from the canal on the Eight Mile level below Hamilton, and in many places on the Franklin and Miamisburg levels.

REPAIRS NEEDED.

LOCKS.

Locks at Lockland, Rialto, Excello and above the mouth of the Middletown feeder each need new mitre-sills and floors.

The upper lock at Hamilton should have the walls set back. The lock at Amanda and the walls of the lock in Middletown should be rebuilt.

CANAL BANKS.

The canal banks between Cincinnati and Rialto in many places need raising.

About three miles of canal bank between Hamilton and Miamisburg need raising and widening, and about two miles of canal banks between the Middletown dam and Miamisburg should be cut down.

LOCK GATES.

Three pairs of new lock gates are needed on this subdivision.

AQUEDUCTS.

The aqueducts at Carthage and at Crane's Run, near Hamilton, should be rebuilt.

The aqueduct at Fairfield should be enlarged, and have new masonry. The aqueduct at Port Union should be repaired.

CULVERTS.

Two (2) culverts on the level above Lockland should be repaired.

WASTE WEIRS.

Three (3) waste weirs on the Six Mile level above Lockland need rebuilding.

WASTE GATES.

The waste gates below Hamilton, and those at Middletown, should be rebuilt.

REPAIR BOATS.

State repair boats Nos. 1 and 2 each should receive some repairs.

CATCH BASINS.

There should be two new catch basins built on the Rockdale and the Franklin levels, and all old catch basins need more or less repair.

DOCKS.

Considerable repairing of docks is needed.

MISCELLANEOUS REPAIRS.

A new change bridge should be built at Carthage. The towing bridge through Carthage aqueduct should be renewed. The tumble at the Crescentville lock should be rebuilt. The waste gates at Lockland should have new walls and new frame. The State dam above Middletown should have two hundred (200) feet of apron renewed, and the banks of the Middletown feeder should be made heavier.

ANNUAL REPORT OF THE REPAIRS

Made on subdivision No. 2, grand division No. 3, Miami and Erie canal during the year ending November 15, 1898, by superintendent of repairs,

JOHN O'CONNOR.

This subdivision extends from Miamisburg to New Bremen, including in addition the Sidney feeder and the Loramie and the Lewistown reservoirs. The length of this subdivision is 80 miles.

Hugh Brennan, foreman State boat No. 1, Dayton, O., 6 years' service.

Edward McConnell, foreman State boat No. 2, Piqua, O., 23 years' service.

Thomas McDermott, foreman dredge No. 4, Dayton, O., 9 years' service.

James Burt, carpenter, Lockington, O., 28 years' service.

There are on this subdivision two (2) State repair boats, one (1) steam dredge, two (2) teams, and numerous tools and appliances, an inventory of which is on file in this office; all of which is State property.

LOCKS.

Locks Nos. 3 and 5 at Lockington and the lock at Mad river at Dayton were unwatered; floors repaired and new mitre-sills placed in them.

The walls of locks Nos. 9 and 11 and the three locks above Dayton and the Carrollton lock were set back and aligned.

CANAL AND CANAL FEEDER BANKS.

The floods of March 22 and 23, 1898, did great damage to the canal and canal feeder banks requiring extensive repairs, all of which were done in as short a time as the nature of work and circumstances would permit.

LOCK GATES.

Four sets of new lock gates were placed in position as follows: in locks 1 and 4, in the lower lock at Three locks and in the lock at Mad river in Dayton. Five other gates were repaired.

AQUEDUCTS.

The three span aqueduct, 300 feet in length, nine miles above Dayton across the Miami river was quite thoroughly repaired.

The two small aqueducts on the One (1) Mile level south of Troy were repaired.

The south span of the Loramie aqueduct broke down in June and was rebuilt; in September the second span required to be rebuilt.

CULVERTS.

During the flood of March the south span of the double stone arch culvert over Holt's creek was washed out a distance of 25 feet and 12 feet wide. This was repaired as soon as the water receded.

WASTE WEIRS.

The waste weirs on the Four Mile level north of Dayton, on the short level at Three locks and the weir at Oaks creek injured by the flood were repaired.

The east abutment of the Loramie reservoir was washed out, and the west abutment, which was of wood, much decayed and in a dangerous condition; these each were rebuilt and part of the weir itself was repaired requiring 26,000 feet of timber B. M.

FEED GATES.

The east stone abutment of the feed gates below Troy was undermined during the flood of March, and the gates washed out. The abutment was rebuilt on a new foundation, and the entire woodwork of the feed gates restored. The walls or abutments are 16 feet in height with a space between of 18 feet.

The feed gates at Dayton were rebuilt.

WASTE GATES.

The waste gates north of Piqua were washed out during July and were rebuilt with all new timbers. The waste gates at Dayton and on the Four Mile level were repaired.

REPAIR BOATS.

State repair boats Nos. 1 and 2 were placed on dock and caulked. Repair boat No. 1 being too old and decayed to have woodwork repaired was abandoned in the feeder at Dayton.

DREDGING.

Dredge No. four (4) was started south May 1, removing bars and raising canal banks as far south as below Miamisburg during June and July; it then proceeded north as far as the Miami aqueduct working southwardly, removing bars and raising banks as far as Dayton, dredging in all 29,000 lineal feet of canal.

CATCH BASINS.

All the catch basins were cleaned and repaired as needed.

GRASS CUT.

The growth of water grass was so rapid that it had to be cut five (5) times on the Summit level and twice on the Six (6) Mile level north of Dayton.

BRUSH AND WEEDS.

The brush and weeds were cut from the canal banks the entire length of the subdivision.

RESERVOIR BANKS.

A severe wind storm during March drove the water in waves against the bank of the Lewistown reservoir greatly damaging the same and rendering it dangerous. About 350 feet of wooden protection was destroyed, but by persistent efforts a break was prevented.

There has been 5,390 lineal feet of this r servoir embankment protected by driving a row of piling about seven feet apart between centers parallel with and 15 feet distant from the top of the embankment, and the space between the bank and row of piling filled with old timbers that will float, forming a break water against waves.

When the abutment of the waste weir of the Loramie reservoir was destroyed by the flood 135 feet of the adjoining bank was washed out requiring 2,800 cubic yards of earth to restore the same.

DAMS.

During the flood of March one-half of the south abutment of the Mad river dam was destroyed and rebuilt on a better foundation.

The dam above Piqua was repaired and a new guard bank was built 265 feet long and six feet high.

New sheeting 275 feet long and 12 feet in width was placed on the Port Jefferson dam on the Miami river.

REPAIRS NEEDED.

LOCKS.

Several locks on this subdivision should be unwatered, and their floors and mitre-sills repaired.

CANAL BANKS.

The canal banks in many places need raising, which can be done in part by the dredge.

LOCK GATES.

Six pairs of new lock gates are needed.

AQUEDUCTS.

The piers of the aqueduct over the Loramie at Lockington should be put in a good condition, and the five (5) spans of the superstructure thoroughly overhauled.

DAMS.

The dam on the Miami river above Piqua, should be put in a good state of repair.

CULVERTS.

The Rumley culvert, and the first culvert north of Turtle creek are in a weakened condition, and need repairs.

DREDGING.

The canal north of the Miami aqueduct, in many places should be dredged.

WASTE WEIRS.

The waste weir near Tippecanoe, 100 feet in length, should be rebuilt.

RESERVOIR BANKS.

The bank of the Lewistown reservoir near Lake View, should have 600 lineal feet of protection.

About 700 lineal feet of the north end of this reservoir embankment should be raised about two feet higher.

REPAIR BOATS.

A new repair boat is needed to take the place of No. 1, abandoned as worthless.

ANNUAL REPORT OF THE REPAIRS

Made on subdivision No. 3, grand division No. 3, Miami and Erie canal during the year ending November 15, 1898, by superintendent of repairs,

H. W. MEACHAM.

This subdivision extends from New Bremen to Toledo, a distance of 124 miles, and includes a short portion of the Wabash and Erie canal, the St. Mary's feeder and the Grand reservoir, a total length of 127 miles of canal.

The following is a list of foremen of repairs regularly employed on this subdivision, also the postoffice address of each, and the number of years that each has been employed on the public works:

S. E. Allman, P. O., Toledo, 4 years' service.

J. R. Spencer, P. O., Delphos, 13 years' service.

Wm. Casteel, P. O., St. Mary's, 4½ years' service.

J. W. Woodward, P. O., St. Mary's, 2 years' service.

There are on this subdivision three (3) repair boats, one (1) steam dredge and tender or boarding boat, two (2) scows, four (4) horses and two (2) mules, besides numerous tools and appliances, an inventory of which is on file in this office; all of which is State property.

LOCKS.

Locks Nos. 7, 9, 11, 24, 26, 29, 32, 35, 36, 45, 46, 48, 49, 50; each received needed repairs, and lock No. 2 was constructed anew.

CANAL BANKS.

The canal bank was repaired and leakage stopped between locks Nos. 1 and 2 and between locks 4 and 5.

The canal bank was raised in various places along the Seven, Nine and Eighteen Mile levels, and in the city of Toledo.

The banks of the St. Mary's feeder were repaired from the canal to the Grand reservoir.

LOCK GATES.

The gates at locks Nos. 26, 32, 35, 37, 38, 45 and 46 received needed repairs.

AQUEDUCTS.

The aqueducts at St. Mary's, at Six Mile, Blue creek and Jenning's creek received slight repairs.

CULVERTS.

The culverts at St. Mary's feeder, lock No. 2 on the Nine (9) Mile level, Ottoville and Mandale, each were repaired and freed from debris.

The culvert at Maumee has received constant attention and repairs.

Six (6) new culverts were placed under towing path along the slack water.

WASTE WEIRS.

New waste weirs were placed at locks Nos. 2 and 35, and the waste weirs at locks Nos. 3, 6, 30, 31 and 48 received needed repairs.

A new surface waste weir was placed near the dry dock at Junction.

WASTE GATES.

The waste gates above Waterville and Napoleon, were each repaired.

REPAIR BOATS.

The repair boats, F. A. Huffman and Samuel Bachtell were eached calked and painted during the year.

DREDGING.

The St. Mary's feeder was dredged and the banks raised a distance of 1½ miles, and the bar below lock No. 7 was dredged out.

DOCKS.

One hundred and eighty feet of canal bank at Spring street bridge at St. Mary's and the canal bank at St. Andrews bridge, Paulding county, was revetted, and a new dock was constructed at the collector's office at Napoleon.

WEEDS CUT.

The weeds and sweet clover were cut from the canal banks between Delphos and Junction, also between Defiance and Toledo, and the water grass was cut from the boating channel of the canal between locks Nos. 1 and 2, twice during the season.

BRUSH CUT.

The brush was cut from the towing path along the slack water and the Eighteen Mile level, and also between Delphos and Junction.

BRIDGES.

The bridges at the St. Mary's aqueduct, Blue Creek aqueduct, crossing the run at the collector's office at Defiance and crossing waste weir at Kuhn's lock, each received needed repairs.

The State's towing bridge across the Maumee river at Defiance received some new flooring, and a new towing bridge was placed on the aqueduct at Jenning's creek.

DAMS.

The dam at Independence received needed repairs. The fish chute at the same dam was repaired.

The dam at Providence received some repairs.

RESERVOIRS.

The rip rap along the entire length of the West embankment of the Grand reservoir, a distance of 2½ miles, was replaced, the rip rap along the East embankment was replaced a distance of 1½ miles, and the waste weir at the Southwest corner of the reservoir was repaired.

BREAKS.

The break near Boyds on the Nine Mile level, 30 feet wide and 30 feet deep, was repaired. The breaks at Schooley's lock and at the head of locks 18 and 19 were each repaired.

MISCELLANEOUS REPAIRS.

A new rack and stone protection to the abutments was placed at the canal feeder at Providence. The towing bridge across the forebay at the Damascus saw mill was removed and an embankment of earth used instead.

A great many posts were placed in the high bank above Texas to prevent displacement. A new platform and steps were placed under the bridge at lock No. 51. The Dry dock at Miami was cut off by a dam made of sheet piling.

A new body was placed on the road wagon on Spencer's subdivision.

The drift and debris was removed from the Providence feeder and from the towing path and bank of the Maumee slack water.

REPAIRS NEEDED.

LOCKS.

Locks Nos. 3, 5, 9, 18, 19, 21, 26 and 29 need renewing in the upper story; the materials for locks Nos. 19 and 29 have been prepared and should be placed in position as early in the spring as it is possible to do so.

Locks Nos. 4, 11, 12, 13, 14, 27, 37, 40, 43, 45 and 49 need extensive repairs.

Locks Nos. 37 and 43 are river locks, and are greatly in need of repairs, which will be expensive on account of building coffer dams and unwatering the locks.

Locks Nos. 7, 16 and 20 need light repairs.

CANAL BANKS.

The banks of the canal on the Nine (9) Mile level need raising almost the entire distance, and in many other places on this subdivision.

LOCK GATES.

New lock gates are needed at locks Nos. 2, 8, 15, 18, 21, 26, 27, 34, 38, 43 and 46.

AQUEDUCTS.

The abutments and aqueduct at the Six (6) Mile creek North of St. Mary's being in a very bad condition, should be rebuilt.

A new aqueduct should be built across Jenning's creek North of Delphos.

CULVERTS.

A new culvert should be constructed under the canal above Maumee to replace the one now there, that has become dangerous.

A new culvert is needed under the hydraulic in St. Mary's.

WEIRS.

New weirs or tumbles are needed at locks Nos. 15, 27, 29, 32 and 33.

WASTE GATES.

New waste gates are needed on the Five (5) Mile level North of St. Mary's, at Spencerville and Texas.

The waste gates above Napoleon need extensive repairs.

REPAIR BOATS.

The repair boats on this subdivision should be caulked and painted, and the repair boat Samuel Bachtell needs considerable repairing.

DREDGING.

Much dredging should be done between New Bremen and Defiance. The Twenty-four (24) Mile level needs dredging in many places.

DOCKS.

The docks at Independence and Bucklin locks need some repairing.

BRIDGES.

A new change bridge is needed at Independence.

DAMS.

The dam at Providence needs new top sheeting during the coming season; the amount of lumber necessary for this purpose is approximately 100,000 feet B. M.

The dam at Independence needs extensive repairs, in order to make it safe and stop leaks.

MISCELLANEOUS REPAIRS.

There should be purchased for this subdivision one (1) new wagon and two (2) new mowing machines; the latter to be used to cut the heavy growth of weeds from the towing path during the summer.

In closing this report it again gives me pleasure to commend the integrity, energy and faithful service of your assistant engineer, secretary, clerk and your several officers on the line of the public works, and to extend to your Honorable Board my thanks and appreciation of your kind consideration and encouragement at all times tendered me in the discharge of my official duties.

I also beg the pleasure of acknowledging in this report kind and courteous treatment by the canal commissioners in my official connection with that department, and the valuable service rendered me by Messrs. E. E. Booton and A. H. Sawyer of the canal commissioner's office, in the preparation of cross sections, map and profile contained herein.

Respectfully submitted,

CHAS. E. PERKINS,
Chief Engineer, Public Works.

ABSTRACT OF MONEY PAID

By W. M. Hiltabidle, Superintendent Division No. 1, Subdivision No. 1, Ohio Canal, for Material and Labor for the Maintenance and Repair of the Public Works.

No. of voucher.	To whom.	And for what paid.	Amount.
	November, 1897.		
1	Chas. Hatch	Feeding State's team, etc	$20 50
2	W. S. McFarland	" horse	10 00
3	John Moore	" team, etc	21 15
4	C. La Rue	Expense as collector at Cleveland	4 80
5	David Atwater	" " and office rent	25 83
6	C. W. Riley	Blacksmith work	5 40
7	The Cleveland Stone Co	Protection stone	27 00
8	Daniel Burns	"	15 00
9	Sorrick & Harter	Hardw. supplies for general repairs	25 17
10	The Berry & Son Co	Papering lock house at lock No. 1	16 64
11	W. E. Spidel	Lumber on lock gates	67 84
12	The Thomas Lumber Co	" for repairing State boat	26 25
13	The Hankey Lumber Co	" " general repairs	130 58
14	Webster, Camp & Lane	Lock gate castings	20 10
15	W. M. Hiltabidle	Expenses as superintendent	49 70
16	J. E. Peterson	Tile for water drain	5 25
17	The Ohio Glass & Hardware Co.	Wire cable for derrick	6 40
18	Western Union Telegraph Co	Use of lines	3 30
19	Martin Heiser	Making gates	135 00
20	Zinsmaster & Fisher	Lantern, bit and file	1 00
21	Leonard Hess	Coal for collector's office	45 00
22	H. A Fisher	One boat pump, etc	3 00
23	Chas. E. Perkins	Expenses as chief engineer	12 00
	Pay roll, officers	Salaries	453 66
	" No. 1	Labor	396 00
	Total for month		$1,526 07
	December, 1897.		
1	Chas. Hatch	Feeding State team, etc	10 50
2	John Moore	" "	10 00
3	W. S. McFarland	" " "	10 00
4	C. La Rue	Expenses as collector	1 30
5	J. H. Morrison	" "	5 55
6	The Mills, Gray Carleton Co	Lumber for rep. Peninsula aqueduct	30 72
7	Sorrick & Harter	Hardware for general repairs	7 55
8	Jobe Bros	" "	2 10
9	L. Beers	" "	7 83
10	Andrew Stewart	One barrel salt	1 00
11	J. M. Laffer	Paint, etc., for locktender's buggy	2 70
12	Webster, Camp & Lane	Rods & cast'gs for Peninsula aqu'ct	33 43
13	W. M. Hiltabidle	Expenses as superintendent	52 70
14	John Pringle	Livery for chief engineer	10 00
15	E. Colloredo	Harness repairs and supplies	12 30
16	Chas. E. Perkins	Expenses as chief engineer	10 00
	Pay roll, officers	Salaries	453 66
	" No. 1	Labor	213 25
	Total for month		$874 58

ABSTRACT OF MONEY PAID—Continued.

No. of voucher.	To whom.	And for what paid.	Amount.
	January, 1898.		
1	Chas. Hatch	Feeding State's horse, etc.	$11 90
2	W. S. McFarland	" "	10 00
3	John Moore	" "	12 30
4	Frank Courtney	Stone for protection at Portage	12 50
5	Geo. H. Stebbens	" " 8 Mile lock	35 00
6	The McIntosh Huntington Co.	Hardware supplies	5 75
7	Sorrick & Harter	"	6 95
8	The Thomas Lumber Co	Soft lumber for general repairs	20 49
9	The Hankey Lumber Co	" " float bridge	148 32
10	W. M. Hiltabidle	Services as superintendent	53 05
11	Chas. Perkins	Expenses as chief engineer	12 50
	Pay roll, officers	Salaries	453 66
	" No. 1	Labor	306 25
	Total for month		$1,088 67
	February, 1898.		
1	Chas. Hatch	Feeding State's horse, etc.	16 55
2	W. S McFarland	" " "	10 00
3	John Moore	" " "	10 00
4	A. J. Miller	" " mules during winter	15 00
5	H. C. Currier	Stone for bank protection	46 80
6	The Cleveland Stone Co.	" "	66 00
7	Rollie Broughton	Hauling stone by contract	47 25
8	C. W. Riley	Blacksmith work	8 25
9	Sorrick & Harter	Hardware supplies	14 40
10	The McIntosh Huntington Co.	"	42 55
11	The Berry & Son Co	Blinds for lock house No. 1	4 50
12	The Capron Curtis Co.	Stationery sup. for superintendent	1 25
13	J. H. Morrison	Expenses as collector	3 72
14	C. La Rue	" "	2 00
15	W. M. Hiltabidle	" superintendent	50 30
16	The Mills, Gray Carleton Co	Lumber for wheeling plank, etc.	12 73
17	Chas. E. Perkins	Expenses as chief engineer	11 00
18	Samuel Bachtell	" ass't. "	10 00
	Pay roll, officers	Salaries	453 66
	" No. 1	Labor	456 00
	" No. 2	"	147 50
	" No. 3	"	212 25
	Total for Month		$1,641 71
	March, 1898.		
1	Chas. Hatch	Feeding State's team, etc	22 61
2	W. S. McFarland	" horse	10 00
3	John Moore	" team	20 00
4	W. C. Mott	Repairing woodwork	4 25
5	H. C. Currier	Protection stone for towing path	54 00
6	Martin Heiser	Repair work on State boat No. 1	261 96
7	Sorrick & Harter	Hardware supplies	25 26

ABSTRACT OF MONEY PAID—Continued.

No. of voucher.	To whom.	And for what paid.	Amount.
	March, 1898—Concluded.		
8	John Gross	Hardware supplies	$9 00
9	The Standard Hardware Co	"	44
10	J. E. Peterson	Brick and cement for repair. lock	17 90
11	Dague Bros	Canvas deck covering	7 36
12	The Capron & Curtis Co	Letterheads for Supt's. office	2 00
13	C. W. Riley	Blacksmith work	7 65
14	S. M. Buckmaster	"	13 15
15	W. M. Hiltabidle	Expenses as superintendent	52 95
16	The Akron Shoe Co	Rubber boots	28 00
17	W. E. Spidel	Lumber for general repairs	59 52
18	Chas. E. Perkins	Expenses as chief engineer	13 00
	Pay roll, officers	Salaries	453 66
	" No. 1	Labor	237 33
	" No. 2	"	74 50
	" No. 3	"	417 50
	" No. 4	"	484 74
	" No. 5	"	78 36
	Total for month		$2,355 14
	April, 1898.		
1	Chas. Hatch	Feeding State's team, etc	20 98
2	W. S. McFarland	" horse	10 00
3	John Moore	" team	20 00
4	C. LaRue	Expenses as collector	1 80
5	James Stevens	Coal for Cleveland collector's office	11 60
6	John Neville	Protection stone	15 75
7	The Brown Lumber Co	Lumber for general repairs	24 79
8	W. M. Seeley	" "	19 08
9	W. E. Spidel	" "	95 40
10	S. A. Conrad	Hardware for general repairs	28 23
11	John Gross	" "	17 15
12	Sorrick & Harter	" "	63 06
13	J. G. Burton	Labor & mater. for State boat No. 1	223 16
14	E. Colloredo	Harness and repairs	20 75
15	W. M. Hiltabidle	Expenses as superintendent	50 95
16	Chas. E. Perkins	" chief engineer	14 00
	Pay roll, officers	Salaries	453 66
	" No. 1	Labor	429 87
	" No. 2	"	316 75
	" No. 3	"	538 52
	Total for month		$2,375 50
	May, 1898.		
1	Chas. Hatch	Feeding State's team, etc	20 50
2	C. La Rue	Expenses as collector	3 50
3	The Cleveland Telephone Co	Use of telephone six months	48 00
4	George H. Stebbens	Protection stone	21 00
5	Benjamin Moorhead	"	44 00

ABSTRACT OF MONEY PAID—Continued.

No. of voucher.	To whom.	And for what paid.	Amount.
	May, 1898—Concluded.		
6	The Cleveland Stone Co	Wall stone for Peninsula aqueduct	$165 00
7	" Brick Co	Brick for repairing lock, etc	17 29
8	L. Broughton	Supplies for State boat No. 1	6 05
9	G. M. Boody	Blacksmith work	1 80
10	A. Pfans	Cleaning and repairing harness	3 05
11	L. Beers	Supplies for State boat No. 1	7 92
12	George Coombs	Blacksmith work	2 80
13	A. Adamson	Bolts for bridge at lock 1	2 44
14	J. E. Peterson	Cement, brick, etc	65 16
15	W. M. Hiltabidle	Expenses as superintendent	51 95
16	J. G. Burton	Repairing State boats	36 01
17	Dague Bros	Paper for lock houses	12 42
18	Riley Bros	Patching plaster in lock house	4 50
19	Sorrick & Harter	Hardware for general repairs	45 42
20	W. S. McFarland	Feeding State's horse	10 00
21	Dan. L. Whitney	Lettering State boat "C. E. Perkins"	5 00
22	J. H. Morrison	Expenses as collector	6 05
23	G. L. Cook	Lock gate and bridge timbers	140 47
24	H. A. Fisher	Stovepipe for State boat No. 3	95
25	Myers Bros	Hardware "	16 80
26	F. E. Heisler	Blacksmith work	2 90
27	Robt. Hugg	Lumber	2 49
28	G. W. Brankle	Blacksmith work	3 15
29	John Moore	Feeding State's team, etc	20 25
30	Samuel Bachtell	Traveling expenses as ass't eng	7 00
31	Chas. E. Perkins	" chief eng	14 00
32	John Gretzinger	Material furnished	88 50
	Pay roll, officers	Salaries	453 66
	" No. 1	Labor	390 00
	" No. 2	"	289 25
	" No. 3	"	250 25
	Total for month		$2,259 58
	June, 1898.		
1	Chas. Hatch	Feeding State's team, etc	21 00
2	C. LaRue	Expenses as collector	2 30
3	Albert Likens	Use of steam hoist, derricks, etc	98 00
4	James Stevens	Labor & ma. used to rep. lock house	8 00
4	C. G. Hienton	Blacksmith work	5 47
6	The Cleveland Telephone Co	Use of telephone three months	24 00
7	George Coombs	Blacksmith work	5 65
8	The Cleveland Brick Co	Brick for repairing lock wall	15 75
9	George L. Cook	Oak plank	99 00
10	C. W. Riley	Blacksmith work	27 35
11	Riley Bros	Rep. plaster of lock house at lock 1	10 36
12	J. G. Burton	Repairing hand dredge	15 80
13	F. C. Cobb	Old oak timbers for repairing dock	38 61
14	Wm. Haney	Build. chimney of lock h. at lock 1	23 79
15	W. M. Hiltabidle	Expenses as superintendent	53 55
16	The Cleveland T. & V. R. R. Co.	Freight on stone, castings, etc	12 28

ABSTRACT OF MONEY PAID—Continued.

No. of voucher.	To whom	And for what paid.	Amount.
	June, 1898—Concluded.		
17	Sorrick & Harter	Hardware for general repairs	$15 39
18	J. E. Peterson	Cement, brick, lime, etc	33 70
19	G. A. Kemple	Bolts for sluice gates	2 10
20	A. Adamson	" "	4 86
21	A. A. Likens	Building pier at Peninsula aqed'ct.	595 65
22	Riggle Bros	Paint. & paper. lock hou-e at lock 1	31 49
23	David Atwater	Expenses as collector, six months	7 86
24	John Moore	Feeding State's team, etc	23 00
25	W. S. McFarland	" horse	10 00
26	Chas. E. Perkins	Expenses as chief engineer	15 00
	Pay roll, officers	Salaries	462 66
	" No. 1	Labor	477 25
	" No. 2	"	324 87
	" No. 3	"	351 25
	Total for month		$2,815 49
	July, 1898.		
1	Chas. Hatch	Feeding State's team, etc	21 69
2	C. LaRue	Expenses as collector	2 56
3	W. M. Seeley	Lumber for Peninsula aqueduct	230 92
4	Jacob Bennage	" Everett "	147 09
5	A. A. Likens	Blg. abutments to Peninsula aqud't	779 00
6	Jobe Bros	Roofing lock house, etc	13 35
7	The Cleveland Stone Co	Stone for Peninsula aqueduct	303 38
8	The C. T. & V. R. R. Co	Freight	1 75
9	W. U. Telegraph Co	Telegrams	3 52
10	J. H. Morrison	Expenses as collector	4 83
11	The Capron & Curtis Co	Printing foreman's report blanks	2 50
12	A. Adamson	Rope hooks	2 88
13	H. Myers	Repairs to buggy	3 00
14	Webster, Camp & Lane	Castings and machine work	50 60
15	W. M. Hiltabidle	Expenses as superintendent	54 95
16	W. S. McFarland	Feeding State's horses	10 00
17	E. Colloredo	Harness and repairs	15 05
18	James McGowan	Earth for raising towing path	16 00
19	The Hankey Lumber Co	Lumber for general repairs	75 08
20	Dague Bros	Paper for lock house at lock 1	14 88
21	Sorrick & Harter	Hardware supplies for gen. repairs.	51 08
22	The National Sewer Pipe Co	Pipe	27 50
23	S. M. Buckmaster	Blacksmith work	8 75
24	John Moore	Feeding State's team, etc	20 50
25	Chas. E. Perkins	Expenses as chief engineer	11 50
26	W. E Spidel	One set of lock gates	57 63
27	Wm. Hublinger	Damages for horse killed by mule	25 00
28	John Paul	" earth taken to fill break	50 00

ABSTRACT OF MONEY PAID—Continued.

No. of voucher.	To whom	And for what paid.	Amount.
	July, 1898—Concluded.		
	Pay roll, officers	Salaries	$462 66
	" No. 1	Labor	405 50
	" No. 2	"	204 75
	" No. 3	"	251 25
	Total for month		$3,329 15
	August, 1898.		
1	Chas. Hatch	Feeding State's team, etc	21 00
2	C. LaRue	Expenses as collector	3 15
3	Dalzell & Scott	Cindering and raising tow path	100 00
4	W. Bingham & Co	Guys for derrick	53 58
5	The Cleveland Stone Co	Wall stone for Peninsula aqueduct	63 53
6	J. W. Rowles	One ton of coal	3 00
7	W. M. Seeley	Lumber for repairing lock	49 16
8	Fred Waters	Use of steam engine	10 00
9	J. E. Peterson	Sewer-pipe, cement, etc	13 36
10	W. S. McFarland	Feeding State's horse	10 00
11	Martin Heiser	Making lock gates	70 00
12	C. W. Riley	Blacksmith work	40 00
13	The Akron Water Works Co	Use of steam pump	20 00
14	W. M. Hiltabidle	Expenses as superintendent	51 30
15	John Gross	Hardware supplies	39 50
16	Sorrick & Harter	"	30 68
17	Myers Bros	"	38 01
18	W. E. Spidel	Lumber	167 74
19	G. W. Bramble	Blacksmith work	1 05
20	John Moore	Feeding State's team	20 00
21	John Pringle	Livery	21 00
22	Chas. E. Perkins	Expenses as chief engineer	12 00
	Pay roll, officers	Salaries	462 66
	" No. 1	Labor	289 75
	" No. 2	"	272 75
	" No. 3	"	302 25
	Total for month		$2,165 47
	September, 1898.		
1	Chas. Hatch	Feeding State's team	20 00
2	W. S. McFarland	" horse	10 00
3	John Moore	" team, etc	21 60
4	Geo. Stebbens	Supplies for State Boat No. 1	2 75
5	F. Wood & Son	" "	2 50
6	McIntosh-Huntington Co	Hardware for general repairs	5 44
7	L Beers	" "	6 62
8	Sorrick & Harter	" "	24 94
9	Hemperly & Jacobs	" "	5 09
10	George Combs	Blacksmith repair work	5 30
11	C. W. Riley	" "	14 50
12	T. Heisler	" "	2 65

ABSTRACT OF MONEY PAID—Continued.

No. of voucher.	To whom	And for what paid.	Amount.
	September, 1898—Concluded.		
13	W. H. Payne	Dry dock repair work, etc	$9 60
14	Conrad, Dangler & Brown	Soft wood lumber	2 73
15	W. M. Hiltabidle	Expenses as superintendent	55 95
16	W. E. Spidel	Lumber for repairing bridge work	73 40
17	D. Jackson & Co	" general repairs	76 66
18	C. LaRue	Expenses as collector	4 34
19	Chas. E. Perkins	" chief engineer	10 00
	Pay roll, officers	Salaries	462 66
	" No. 1	Labor	292 25
	" No. 2	"	239 50
	" No. 3	"	300 00
	Total for month		$1,648 48

ABSTRACT OF MONEY PAID

By Chas. H. Geidel, Superintendent Division No. 1, Subdivision No. 2, Ohio Canal, for Material and Labor for the Maintenance and Repair of the Public Works.

No. of voucher.	To whom.	And for what paid.	Amount.
	November, 1897.		
1	L. P. Wilson	Feeding stock	$ 20 00
2	Alfred Shoman	" " and other expenses	20 60
3	C. S. Frazier	Hardware	1 65
4	A. H. Thompson & Son	1 barrel of cement	1 15
5	Sherman Stemple	Blacksmith work and iron	3 00
6	H. P. Williams & Son	" " on Trenton gates	2 55
7	J. G. Fredrick	Rep'g State emb'k'nt at 6 Mile dam	50 00
8	I. J. Baker	1,000 c. y. earth for break 6 Mile dam	30 00
9	M. G. Hack	50 c. y. rip rap stone @ 45c per yd	22 50
10	E. B. Rogers	Shoeing State horse	90
11	Geo. Sykes	Expenses as collector	8 80
12	Sykes & Bell	Hardware	80
13	John Medley	1 whipple-tree, spreader & filing saws	1 35
14	C. M. Ferguson	3 gals. mixed paint, 2 papers tacks	4 29
15	Edwin Burchfield	Blacksmith work on Roscoe bridge	4 90
16	R. M. Elliott	Repairing pumps & 2 smoke-stacks	3 65
17	Chas. H. Geidel	Expenses as superintendent	39 05
18	J. E. Foster	Medicine for State horse	75
19	S. T. Naylor	Tending guard lock at Sugar creek	10 00
	Pay roll, officers	Salaries	264 16
	" No. 1	Labor	107 50
	Total for month		$597 60
	December, 1897.		
1	L. P. Wilson	Feeding stock and freight	21 10
2	Alfred Shoman	Feeding stock & rent of capstan	21 25
3	S. T. Naylor	Expenses as collector & tend. stock	16 17
4	Chas. N. Geidel	" superintendent	48 30
5	Geo. Sykes	" collector	1 25
6	Wm. T. McLean	" to Dresden and return	4 40
7	Schoedinger, Fearn & Co	Hardware for lock gates	24 76
8	The Zoar Society	Rents	115 00
	Pay roll, officers	Salaries	264 16
	" No. 1	Labor	108 00
	Total for month		$624 89
	January, 1898.		
1	L. P. Wilson	Feeding stock	20 00
2	Alfred Shoman	" "	20 00
3	The Penn. Iron & Coal Co	2 steel wrenches @ 75c	1 50
4	S. S. Mugrage	½ day livery team (Wilson)	1 50
5	Geo. B. Deardorff	Hardware (for Wilson's division)	1 95
6	G. W. Hilton	3 months' rent for Wave Mill dam	50 00
7	Charles H. Geidel	Expenses as sup't for January	49 80
8	R. M. Elliott	Rep'g pumps & smoke-s'k on dredge	1 50

ABSTRACT OF MONEY PAID—Continued.

No. of voucher.	To whom.	And for what paid.	Amount.
	January, 1898—Concluded.		
9	Sykes & Bell	25 feet rope (for Shoman's division)	$ 2 25
10	S. T. Naylor	Expenses tending guard lock	10 00
11	Wm. T. McLean	Trav'g exp. in col. rents at Dresden	4 40
12	George Sykes	Expenses as collector	3 50
	Pay roll, officers	Salaries	264 16
	" No. 1	Labor	135 25
	Total for month		$565 81
	February, 1898.		
1	L. P. Wilson	Feeding stock & incidental expenses	30 35
2	Alfred Shoman	" "	20 00
3	John Wilson	Mak. 1 pair lock gates for Zoar lock	40 00
4	S. T. Naylor	Tending Sugar Creek guard lock	10 00
5	A. M. Grenell	Lumber for 3 prs. lock gates at Zoar	101 59
6	Chas. H. Geidel	Expenses as superintendent	55 50
7	Chas. E. Perkins	" chief engineer	7 50
8	Shore Bros.	The care of water at Dresden	10 00
	Pay roll, officers	Salaries	264 16
	" No. 1	Labor	105 50
	Total for month		$644 60
	March, 1898.		
1	L. P. Wilson	Feeding stock & cost of tel. messages	21 95
2	Alfred Shoman	Feeding stock	20 00
3	"	Railroad fare & hotel bills dur. flood	5 80
4	S. T. Naylor	Tending Sugar Creek guard lock	10 00
5	F. Wentz & Co.	Lumber for rep'g Bolivar aqueduct	6 66
6	Geo. B. Deardorff	Hardware (for Wilson)	6 90
7	C. E. Reiser	Grass hooks, rope, etc.	3 58
8	Chas. H. Geidel	Expenses as superintendent	55 20
9	John Wilson	Making 2 pairs lock gates for Zoar.	80 00
10	George Sykes	Expenses as collector	4 50
11	Sykes & Bell	Hardware & supplies for gen. repairs	20 14
12	Chas. E. Perkins	Expenses as chief engineer	9 50
13	A. N. Compton	One set of harness	10 00
	Pay roll, officers	Salaries	269 16
	" No. 1	Labor	247 25
	" No. 2	"	171 49
	Total for month		$942 13
	April, 1898.		
1	L. P. Wilson	Feed stock & cash paid for sundries	27 83
2	Alfred Shoman	Feeding stock	20 00
3	S. T. Naylor	Exp. as collector, tending lock and building purchased for tool house	25 05
4	Harry Winnich	Dredging out slip at his coal dock	25 00
5	J. Hanlon	Serv. as eng. at White Eyes break	14 00
6	Sykes & Bell	Hardware	74 70

ABSTRACT OF MONEY PAID—Continued.

No. of voucher.	To whom.	And for what paid.	Amount.
	April, 1898—Concluded.		
7	Al. Shoman	Expenses during flood	$13 00
8	Slusser-McLean Co	4 wheel scrapers	88 00
9	D. Wright & Sons	Repairing wheel scraper	5 00
10	Chas. H. Geidel	Expenses as superintendent	67 25
11	Western Union Telegraph Co	Messages for March and April	4 52
12	Central Union Telephone Co	Tolls during March and April	1 05
13	G. W. Hilton	3 months' rent for Wave Mill dam	50 00
14	Geo. B. Deardorff	Hardware, per Wilson	28 80
15	I. P. Taylor & Son	2 dozen shovels, per Wilson	13 00
16	F. Wentz & Co	Lumber, per Wilson	14 25
17	The Wible-Enck Co	" "	25 25
18	Geo. Egan	22 barrels cement for Dresden aque.	26 40
19	T. J. Comer	Nails, rope & buckets, per Poorman	3 40
20	Frank Tingler	Rep. pipes & hoods on St. boat No. 2	1 50
21	John F. Poorman	Expenses as collector	4 99
22	The Zoar Society	$5\frac{29}{100}$ acres of land	175 00
23	Haas & Adams	Lumber for Dresden aqueduct	61 62
24	J. F. Reiser	Hardware, per Wilson	4 16
25	C. E. Reiser	Wheelbarrows, shovels, etc	7 23
26	G. H. Klein	Scrap., sin.&doub.trees n'k yokes,etc	13 20
27	Chas. E. Perkins	Expenses as chief engineer	9 00
28	Samuel Bachtell	Traveling exp. as asst. engineer	10 00
	Pay roll, officers	Salaries	269 16
	" No. 1	Labor	533 10
	" No. 2	"	241 48
	" No. 3	"	453 95
	" No. 4	"	543 12
	" No. 5	"	630 00
	" No. 6	"	244 00
	" No. 7	"	63 00
	" No. 8	"	274 17
	Total for month		$4,065 18
	May, 1898.		
1	L. P. Wilson	Feeding team, freight and live y	32 65
2	Alfred Shoman	"	20 00
3	R. E. Baker	Papering & whitewashing col. office	2 50
4	The Wible-Enck Co	Lumber for Dover, collector's office	2 99
5	H. E. Burnside	Lamp and oil can for "	1 20
6	F. Reutsch	Paint and labor " "	11 00
7	Jacob A. Lieser	Plastering " "	1 00
8	W. H. Dallman	Wall pap. & wind. shades for "	2 23
9	John Laurman	Carpenter and brick work " "	3 00
10	Ed. Smart	Coal for collector's office	1 95
11	Alfred Shoman	Railroad fare, telephone & freight	13 25
12	Walker Machine Co	Bolts&bl'ks'th w'k for Dresden aque.	27 13
13	J. S. Barnett & Co	Two sacks of cement	90
14	Ed. Burchfield	Blacksmith work	4 45
15	John Medley	Repairing wagon, saws, etc	4 10
16	A. H. Thomson & Son	Cement for Roscoe towing bridge	12 00

ABSTRACT OF MONEY PAID—Continued.

No. of voucher.	To whom.	And for what paid.	Amount.
	May, 1898—Concluded.		
17	C. S. Frazier	Hardware for Dresden aqueduct	$18 00
18	L. B. Townsend & Co	Use of derrick for Dresden aqueduct	20 00
19	Gray Hardware Co	Wheelbarrows and rope	18 27
20	B. Worth Ricketts	Scrapers, wheelbarrows and iron	27 46
21	F. M. Fortune	Set of harness for boat No. 2	14 55
22	Chas. H. Geidel	Expenses as superintendent	51 30
23	E. B. Rogers	Blacksmith w'k on 4 p'rs lock gates	34 45
24	The Wible-Enck Co	Cement for Stony Creek culvert	16 30
25	Geo. B. Deardorff	Hardware for Wilson	1 01
26	Sykes & Bell	" Shoman	8 35
27	G o. Sykes	Expenses as collector	5 75
28	Wardell Bros	Rebuilding Stony Creek culvert	323 95
29	J. Eckman	Lumber for Trenton slides	5 04
30	Worley & Wilson	Labor on Newcomerstown locks	17 50
31	D. L. Lash	Hardware for Wilson	13 90
32	John F. Poorman	Expenses as collector at Dresden	3 46
33	The Wilgus Hardware Co	Hardware for Wilson	12 11
34	Chas. E. Perkins	Expenses as chief engineer	7 00
35	John A. Hanion	Engineering services	5 00
36	John Miller	Making embankment as per contract	1,062 60
37	The New Columbus Bridge Co.	Material furn. for Bolivar aqueduct	781 28
	Pay roll, officers	Salaries	269 16
	" No. 1	Labor	614 70
	" No. 2	"	186 00
	" No. 3	"	155 94
	" No. 4	"	485 35
	" No. 5	"	77 60
	Total for month		$4,376 38
	June, 1898.		
1	L. P. Wilson	Feeding stock	20 00
2	Alfred Shoman	"	20 00
3	John Wilson	Making two pairs of lock gates, etc	80 90
4	Cleveland, Canton&South. R. R.	Lumber for Dresden aqueduct	35 85
5	I. J. Baker	Earth and tim. at Walhonding dam	36 50
6	D. F. Lash	Hardware per Wilson	1 35
7	L. P. Wilson	Two boat poles and extra livery	2 50
8	D. F. Lash	Hardware per Kelley	3 43
9	W. H. Foster	Rent for tool room	7 50
10	Geo. Sykes	Expenses as collector	6 20
11	Chas. H. Geidel	" superintendent	59 10
12	Sykes & Bell	Hardware for Shoman	4 92
13	John F. Poorman	Expenses as collector	53
14	The Zoar Society	Lumber, rope and nails	18 23
15	A. M. Grewell	" for lock gates	68 87
16	The Zoar Society	Lum. for lock gates at Zoar&Bolivar	46 06

ABSTRACT OF MONEY PAID—Continued.

No. of voucher.	To whom.	And for what paid.	Amount.
	June, 1898—Concluded.		
17	The Zoar Society	Lumber for aqueduct at Bolivar	$1,014 62
18	John Norman	Repairing break at Blue Hole	10 00
19	John Hardsock	Remov. drift from Louisville culv't	5 00
20	Samuel Bachtell	Traveling exp. as ass't eng'r	3 00
21	Chas. E. Perkins	" chief "	12 00
	Pay roll, officers	Salaries	269 16
	" No. 1	Labor	352 25
	" No. 2	"	350 49
	Total for month		$2,428 46
	July, 1898.		
1	L. P. Wilson	Feeding stock	20 00
2	Alfred Shoman	"	20 00
3	G. W. Hilton	3 months' rent for Wave Mill dam	50 00
4	W. W. Harvey	Expenses as collector	3 97
5	H. A. Harger	Hardw. for rep. office, Canal Dover	2 83
6	C. S. Frazier	" & paint for State boat No. 2	3 69
7	S. W. Andrews	Lumber for coffer-dam at Trenton	31 32
8	Samuel Hilton	Damages to garden from rem. earth	5 00
9	Chas. H. Geidel	Expenses as sup't for July	53 50
10	John Medley	Dressed stone for Roscoe waste weir	9 75
11	Sykes & Ball	Hardware for general repairs	1 98
12	G. H. Kline	Blacksmith wk. on scrapers & lock	6 95
13	George Sykes	Expenses as collector	2 00
14	G. B Rogers	Blacksmith work for general rep'rs	13 60
15	C. E. Reiser	Hardware for general repairs	4 46
16	D. F. Lash	" Bolivar aqueduct	9 62
17	Wm. E. Lomady	Blacksmith work on Dover lock	2 25
18	L. P. Wilson	Freight, telegraph, telephone, etc.	12 41
19	Alfred Shoman	" "	14 57
20	Samuel Bachtell	Traveling expenses as ass't eng'r	5 00
21	Chas. E Perkins	" chief "	12 50
22	W. M. Brode	Rebuild'g Orange aqueduct abutm.	159 22
23	L. W. Pocock	Team, driver and feed	4 35
24	John Poorman	Cutting grass on Dresden side cut	6 00
25	Daniel Nelson	Boating brick to Bolivar aqueduct	10 00
26	G. W. Hilton	Earth taken for embankment	65 60
	Pay roll, officers	Salaries	269 16
	" No. 1	Labor	479 50
	" No. 2	"	713 85
	" No. 3	"	325 37
	Total for month		$2,318 45
	August, 1898.		
1	L. P. Wilson	Feeding stock	20 00
2	Alfred Shoman	"	20 00
3	Henry Singhaus	10,000 brick for Bolivar aqueduct	50 00
4	C. S. Frazier	Hardware by Poorman	75

ABSTRACT OF MONEY PAID—Continued.

No. of voucher.	To whom.	And for what paid.	Amount.
	August, 1898—Concluded.		
5	Frank Miller	1,500 cu. yds. earth at Roscoe basin	$30 00
6	H. C. Unger	Use of pump at Trenton dam	3 00
7	John Poorman	Exp. as collector and cutting grass.	4 09
8	E. B. Rogers	Shoeing State mule	1 20
9	Alfred Shoman	Expenses, railroad, telephone, etc	5 12
10	Geo. W. Mulvane	Lumber for Suddam's lock	4 80
11	Wm. Smart	Labor in cutting brush and grass	15 00
12	Chas. H. Geidel	Expenses as superintendent	55 85
13	S. Mugrage	2 days' labor with team	6 00
14	A. H. Thomson & Son	191 bbls cement for Bolivar aque't	134 90
15	D. F. Lash	Hardware for Bolivar aqueduct	18 08
16	Fred Weber	Lumber "	6 24
17	The Wible-Enck Co	" "	5 94
18	John Miller	Use of engine, derrick & extra work	52 20
19	L. P. Wilson	Cash paid, freight, pump, etc	9 26
20	John Flad	Blacksmith work for Bolivar aque	20 45
21	M. G Hack	200 c. yds. rip rap stone, 6 Mile dam.	100 00
22	Samuel Bachtell	Traveling exp. as ass't eng'r	5 00
23	C. E Perkins	" chief "	10 00
24	John Miller	Masonery at Bolivar aqueduct	1,542 19
25	Sykes and Bell	Materials furnished	10 91
26	George Sykes	Expense in making collections	4 36
27	Chas. M. Ferguson	Materials furnished	38 37
28	Adams and Gleason	"	39 31
	Pay roll, officers	Salaries	269 16
	" No. 1	Labor	681 50
	" No. 2	"	335 23
	" No. 3	"	66 23
	Total for month		$3,565 14
	September, 1898.		
1	L. P. Wilson	Feeding stock	20 00
2	Alfred Shoman	"	20 00
3	George B. Deardorff	Hardware per Harvey	11 80
4	The Wilgus Hardware Co	" Shoman	45
5	Alfred Shoman	Freight and railroad fare	5 45
6	M. G. Hack	129 cu. yds. rip rap stone	64 50
7	J. F. Poorman	Lumber, expenses as collector, etc	2 50
8	C. S. Frazier	Hardware for Dresden aqueduct	1 20
9	John Miller	10 c. yds. stone, final est. Bolivar aq.	65 00
10	Chas. H. Geidel	Expenses as superintendent	54 85
11	L. W. Pocock	2 teams and single horse for officers	8 25
12	Wm. O. Kirkland	Lumber for tow. bridge, Bolivar ad.	24 32
13	D. F. Lash	Hardw., paint, oil, etc., "	9 82
14	J. O. Lash	Cement for Bolivar aqueduct	5 60
15	C. J. Piau	4 barrels cement for Zoar lock	4 20
16	John Flad	Blacksmith work for Bolivar aque	1 96
17	Wm. Lomady	Shoeing State team	3 00
18	E B Rogers	Blacksmith work for Bolivar aque	2 35
19	L. P. Wilson	Freight, lumber and telegraphy	9 37

ABSTRACT OF MONEY PAID—Continued.

No. of voucher.	To whom.	And for what paid.	Amount.
	September, 1898—Concluded.		
20	Geo. Sykes	Expenses as collector	$1 36
21	Sykes & Bell	Hardware per Shoman	5 51
22	Chas. E. Perkins	Expenses as chief engineer	9 00
23	G. W. Murray	For services performed	40 00
24	L. R. Merise	For use of derrick	10 00
	Pay roll, officers	Salaries	269 16
	" No. 1	Labor	358 10
	" No. 2	"	336 50
	" No. 3	"	284 80
	Total for month		$1,628 55

ABSTRACT OF MONEY PAID

By Wm. Hahn, Superintendent Division No. 2, Subdivision No. 3, Ohio Canal, for Material and Labor for the Maintenance and Repair of the Public Works.

No. of voucher.	To whom.	And for what paid.	Amount.
	July, 1897.		
1	McCune, Owens & Co.	Hardware for Richards	$23 11
2	Benjamin Richards	Feeding horse and use of wagon	15 00
3	Perry Rank	Livery, five times	11 50
4	Wm. Hahn	Expense account	50 50
5	Miles Sands	" as collector	1 73
6	Harvey E. Hite	Livery	1 50
7	Thos. Ditter	Repairing waste gate at Nashport	6 00
8	S. M. Brown	Expenses as collector	1 62
9	Samuel Bachtell	Traveling expenses as ass't engineer	5 10
10	Martin Shirey	Livery	1 25
	Pay roll, officers	Salaries	254 49
	" No. 1	Labor	238 10
	" No. 2	"	34 50
	" No. 3	"	50 00
	Total for month		$694 40
	August, 1897.		
1	Wm. Baker	Bl'ksm'h work for Alex. Richardson	5 50
2	Miles Sands	Expenses as collector	1 86
3	Mrs. Geo. Braunhold	Stovepipes for State boat	1 20
4	J. A. Darnell	Lumber for rep. locks at Lockb'rne	2 88
5	A. Keller and A. T. Keller	" " lock at Baltimore	1 48
6	S. M. Brown	Expenses as collector	30
7	S. J. Ewing, clerk of courts	Costs in Amos Bishop case	4 37
8	Wm. T. Evans	Lumber for repairing aqueducts	80 16
9	M. F. Cochran	Livery	6 75
10	Wm. Hahn	Expenses as superintendent	46 70
11	Benjamin Richards	Feeding horse and use of wagon	15 00
	Pay roll, officers	Salaries	264 49
	" No. 1	Labor	173 75
	" No. 2	"	50 00
	" No. 3	"	33 00
	Total for month		$687 44
	September, 1897.		
1	C. B. Townsend & Co.	Stone for Kirkersville dam	18 00
2	S. M. Brown	Expenses as collector	34
3	Miles Sands	" "	1 55
4	Alex. Richardson	Use of team	3 00
5	Wm. Meizer	" wagon	1 05
6	Benjamin Richards	Feeding horse and use of wagon	15 00
7	Wm. Hahn	Expense account	49 80
8	M. Shiry	Livery	1 25
9	E. Hickey	Lumber for East Newark aqueduct	29 23
10	Samuel Bachtell	Expenses as assistant engineer	5 00

ABSTRACT OF MONEY PAID—Continued.

No. of voucher.	To whom.	And for what paid.	Amount.
	September, 1897—Concluded.		
11	Chas. E. Perkins	Expenses as chief engineer	$5 00
	Pay roll, officers	Salaries	254 49
	" No. 1	Labor	215 75
	" No. 2	"	71 75
	Total for month		$671 21
	October, 1897.		
1	J. T. Harris	Spikes, nails, etc., for Kirkersv'e dam	5 08
2	A. H Austin	Blacksmith work for " "	18 26
3	M. E. Cochran	Livery	2 00
4	Wm. Hahn	Expenses as superintendent	48 10
5	Roshon & Schaffner	Lumber for Kirkersville dam	28 95
6	Frank Carnes	Hauling tools with team	3 00
7	Benjamin Richards	Feeding horse and use of wagon	12 00
8	Samuel Bachtell	Traveling expenses as ass't engineer	2 00
9	C. E. Perkins	" " chief "	6 00
	Pay roll, officers	Salaries	254 49
	" No. 1	Labor	174 87
	" No. 2	"	57 50
	Total for month		$612 25
	November, 1897.		
1	Miles Sands	Expenses as collector	1 97
2	S. M. Brown	" "	65
3	Benjamin Richards	Feeding horse one month	10 00
4	Wm. Hahn	Expenses as superintendent	42 95
5	C. E. Perkins	" chief engineer	8 25
	Pay roll, officers	Salaries	254 49
	" No. 1	Labor	90 68
	" No. 2	"	63 11
	Total for month		$472 10
	December, 1897.		
1	Alex. Richardson	Expense account in Swisher case	1 60
2	Benjamin Richards	Feeding horse	10 00
3	Wm. Hahn	Expenses as superintendent	47 14
4	Perry Rank	Livery	10 00
5	McCune, Owens & Co.	Hardware	13 14
6	S. M. Brown	Expenses as collector	24
7	Samuel Bachtell	Traveling expenses as ass't engineer	4 50
8	Chas. E. Perkins	" " chief "	4 00
	Pay roll, officers	Salaries	254 49
	" No. 1	Labor	65 00
	" No. 2	"	50 00
	Total for month		$460 11

ABSTRACT OF MONEY PAID—Continued.

No. of voucher.	To whom.	And for what paid.	Amount.
	January, 1897.		
1	Benj. Richards	Feeding horse	$10 00
2	M. E. Cochran	Livery	1 50
3	S. M. Brown	Expenses as collector	99
4	H. E. Heller	Hauling at Sharp's landing	3 00
5	Rugg Brothers	Livery	1 00
6	Wm. Hahn	Expenses as superintendent	47 35
7	Hoover & Graves	Livery	2 50
8	Wm. T. McLean	Traveling expenses as secretary	2 50
9	Chas. E. Perkins	" " chief eng'r	4 50
	Pay roll, officers	Salaries	254 49
	" No. 1	Labor	60 50
	" No. 2	"	83 00
	Total for month		$471 33
	February, 1897.		
1	Benj. Richards	Feeding horse	10 00
2	Alex. Richardson	Telephone messages and spikes	70
3	Stephen Nessley	Posts for Kirkersville feeder	6 60
4	Miles Sands	Expenses as collector	3 95
5	S. M. Brown	" "	16
6	M. E. Cochran	Livery	1 50
7	Roshon & Schaffner	Lumber for Kirkersville feeder	80 00
8	Wm. Hahn	Expenses as superintendent	47 95
9	C. E. Perkins	" chief engineer	5 50
	Pay roll, officers	Salaries	254 49
	" No. 1	Labor	63 50
	" No. 2	"	63 50
	" No. 3	"	74 99
	Total for month		$612 24
	March, 1898.		
1	Benj. Richards	Feeding horse	10 00
2	S. M. Brown	Expenses as collector	1 11
3	P. Smith & Son	Lumber for aqueduct near reserv'r	21 56
4	Miles Sands	Expenses as collector	1 74
5	S. N. Rugg	Livery	1 00
6	McCune, Owens & Co.	Hardware	3 36
7	Wm. Hahn	Expenses as superintendent	47 06
8	Chas. E. Perkins	" chief engineer	3 50
	Pay roll, officers	Salaries	254 49
	" No. 1	Labor	184 37
	" No. 2	"	50 00
	Total for month		$528 49

ABSTRACT OF MONEY PAID—Continued.

No. of voucher.	To whom.	And for what paid.	Amount.
	April, 1898.		
1	Benj. Richards	Feeding horse	$10 00
2	Wm. Hahn	Er. in sal. 50c per mo.,'95 to '98, 3 y	18 00
3	S. M. Brown	Expenses as collector	36
4	Miles Sands	" "	1 65
5	Elmer Cassner	Livery	75
6	Wm. Hahn	Expenses as superintendent	50 30
7	Haas & Adams	Lumber	2 72
8	Chas. E. Perkins	Expenses as chief engineer	3 75
	Pay roll, officers	Salaries	218 32
	" No. 1	Labor	51 50
	" No. 2	"	64 75
	Total for month		$422 10
	May, 1898.		
1	Benj. Richards	Feeding horse	10 00
2	Alex. Richardson	Team for hauling	6 00
3	Wm. Hahn	Expenses as superintendent	39 40
4	S. M. Brown	" collector	42
5	Miles Sands	" "	54
6	Zanesville Hardware Co	Oakum	3 50
7	S. N. Rugg	Livery	5 50
8	Wm. T. Evans & Son	Lumber for bulkhead	20 35
9	Carter & Camp	" Kirkersville dam	3 81
10	Wm. T. Turner	" " "	57
11	Henry Geiger	" " "	2 50
12	W. B. Frye	Rep. harness and hame straps	2 20
13	R. L. Wells	24 piling, @ 25c, Kirkersville dam.	6 00
14	H. E. Heller	Teaming	6 00
15	M. E. Cochran	Livery	3 00
16	S. G. Foos	Blacksmith work	16 30
17	Wm. M. Hahn	Lumber for repairing aqueducts	204 00
18	Frank Breakbill	Work on Kirkv. feed. 1¼ d. @ $1.50	1 87
19	Chas. E. Perkins	Expenses as chief engineer	5 00
	Pay roll, officers	Salaries	218 32
	" No. 1	Labor	233 10
	" No. 2	"	189 12
	Total for month		$977 50
	June, 1898.		
1	Benj. Richards	Feeding horse and use of wagon	13 00
2	S. M. Brown	Expense account as collector	42
3	Miles Sands	" "	4 61
4	S. N. Rugg	Livery	3 50
5	H. W. Showalter	Nails, scythes, etc., for Richardson.	75
6	Alex. Richardson	Team for hauling men to work	20 00
7	Kramer & Bolenbaugh	Bolts and spikes	89
8	J. H. Oty	Files, nails and scythe-stone	1 23
9	Wm. Metzger	Hauling plank for Richardson	14 75

ABSTRACT OF MONEY PAID—Concluded.

No. of voucher.	To whom.	And for what paid.	Amount.
	June, 1898—Concluded.		
10	Perry Rank	Livery	$14 00
11	E. M. Cochran	"	2 50
12	Wm. Hahn	Expense account	39 90
13	Samuel Bachtell	Traveling expenses as asst. engineer	3 25
14	Chas. E. Perkins	" " chief "	3 30
	Pay roll, officers	Salaries	218 32
	" No. 1	Labor	239 50
	" No. 2	"	243 50
	Total for month		$823 42
	July, 1898.		
1	S. G. Foos	Shoeing horse and repair work	1 95
2	S. M. Brown	Postage	20
3	Miles Sands	Expense account as collector	70
4	Martin Mock	One day's labor	1 50
5	C. R. Kissenger	Blacksmith work	75
6	McCune, Owens & Co	Hardware	12 74
7	Alex. Richardson	Livery	2 50
8	Perry Rank	" for Hahn and Bachtell	9 00
9	Hoover & Graves	" " "	3 00
10	Wm. Hahn	Expense account as superintendent	47 05
11	Benjamin Richards	Feeding horse and use of wagon	15 00
12	Samuel Bachtell	Traveling expenses on inspection	12 10
13	Chas. E. Perkins	" as chief engineer	3 00
	Pay roll, officers	Salaries	218 32
	" No. 1	Labor	104 75
	" No. 2	"	189 85
	Total for month		$622 41

ABSTRACT OF MONEY PAID

By F. C. Dietz, Superintendent Division No. 2, Subdivision No. 3, Ohio Canal, for Material and Labor for the Maintenance and Repair of Public Works.

No. of voucher.	To whom.	And for what paid.	Amount.
	August, 1898.		
1	Alex. Richardson	Livery	2 50
2	Hoover & Graves	"	5 50
3	McCune & Owens	Hardware	14 50
4	S. M. Brown	Expenses as collector	22
5	Benj. Richards	Feeding horse and use of wagon	15 00
6	Albert Hahn	Expense incurred in paying force	18 00
7	Samuel Bachtell	" on trip to Newark	2 00
8	Estate of Wm. Hahn	Travel'g expenses as superintendent	22 00
9	C. E. Perkins	" " chief engineer	10 00
10	W. H. Radebaugh	Services on damage claim comm'n	12 00
11	W. T. Reese	" " "	8 82
12	James Ward	" " "	14 34
13	W. M. Miller	" " "	24 99
14	S. N. Rugg	Livery	3 00
15	S. Bachtell	Traveling expenses as asst. engineer	3 00
	Pay roll, officers	Salaries	$218 32
	" No. 1	Labor	56 98
	" No. 2	"	88 25
	Total for month		$519 37
	September, 1898.		
1	Miles Sands	Expenses as collector	3 14
2	Alex. Richardson	Hauling for gen. repairs and livery	26 00
3	Frank E. Winters	Hauling and materials	1 25
4	M. E. Cochran	Livery for Superintendent Hahn	3 00
5	Wm. Metzar	Use of wagon	3 00
6	H. W. Showalter	Nails and spikes	20
7	Noah Nunemaker	Repairing harness	35
8	Hoover & Graves	Livery for asst. engineer and supt.	3 50
9	E. F. Swick	Labor and materials furnished	2 00
10	Peter Longworth	Expenses paid in rep. lock house	5 15
11	F. C. Dietz	Traveling exp. as superintendent	35 07
12	Samuel Bachtell	" " asst. engineer	5 00
13	S. M. Brown	Postage as collector	24
14	"	Labor performed	5 00
15	C. C. Benedum	Livery hire	2 00
16	John Benderman	"	4 50
17	George Demoss	Team and labor	1 50
18	E. R. Kissinger	Blacksmith work	2 00
19	S. G. Foos	Horseshoeing	1 75
20	McCune, Owens & Co	Hardware	5 29
21	Benj. Richards	Feeding horse and railroad fare	20 65
22	"	Freight paid	50
23	"	Salary for the month of September	50 00
	Pay roll, officers	Salaries	218 32
	" No. 1	Labor	152 75
	Total for month		$552 16

ABSTRACT OF MONEY PAID

By F. C. Dietz, Superintendent Kirkersville Feeder Improvement, for Material and Labor for the Maintenance and Repair of Public Works.

No. of voucher.	To whom.	And for what paid.	Amount.
	August, 1898.		
1	J. T. Egerton	Engineering services	$ 86 00
2	Arthur Goddard	Labor on engineer corps	25 00
3	James Spenney	" " "	2 25
4	Fred. Clinforth	" " "	1 50
5	Wm. Harlow	" and services performed	30 60
6	John Spurgeon	" on engineer corps	12 00
7	Wm. T. Evans & Son	Material furnished	6 23
8	Geo. Spurgeon	Livery	1 50
	Pay roll No. 1	Labor	164 82
	Total for month		$329 90
	September, 1898.		
1	J. T. Egerton	Engineering services	116 10
2	Newark Publishing Co.	Legal advertising	5 25
3	Roshon & Schaffner	Lumber	78 76
4	C. C. Benedum	Livery	1 00
5	Times Recorder	Legal advertising	6 00
	Pay roll No. 1	Labor	222 00
	Total for month		$429 11
	October, 1898.		
1	Carter & Camp	Lumber furnished	50 64
2	The Blade Printing Co.	Advertising work to let	6 75
	Pay roll No. 1	Labor	24 00
	Total for month		$81 39

ABSTRACT OF MONEY PAID

By W. H. Kirkendall, Superintendent Division No. 2, Subdivision No. 4, Ohio Canal, for Material and Labor for the Maintenance and Repair of the Public Works.

No. of voucher.	To whom.	And for what paid.	Amount.
	September, 1897.		
1	C. T. Watkins	Keeping team	$ 15 00
2	T. J. Guin	" " etc	17 50
3	W. H. Kirkendall	" "	18 65
4	"	Expenses as superintendent	47 35
5	Thos. Journey	Blacksmith	4 00
6	Moses Moyst	"	9 55
7	John W. Lewis	Livery	18 00
8	Chas. E. Perkins	Expenses as chief engineer	5 35
	Pay roll, officers	Salaries	356 65
	" No. 1	Labor	202 00
	" No. 2	"	377 75
	" No. 3	"	282 24
	Total for month		$1,354 04
	October, 1897.		
1	W. H. Kirkendall	Keeping team, etc	17 00
2	Thos. J. Guin	" "	17 50
3	C. T. Watkins	" "	15 00
4	W. H. Kirkendall	Expenses as superintendent	44 50
5	Ed. Reed	Lumber	102 33
6	"	"	75 53
7	Geo. E. Breece	"	280 20
8	Gehres Bros	"	67 50
9	N. Purdum	Hardware	59 34
10	John McEwing	Castings	13 28
11	Jacob Doster	Blacksmith work	66 04
12	John Miller	" "	42 80
13	Brust & Bauch	Stone	63 00
14	Chas. E. Perkins	Expenses as chief engineer	8 50
15	J. L. Brown	Livery	14 00
	Pay roll, officers	Salaries	356 65
	" No. 1	Labor	197 05
	" No. 2	"	778 00
	" No. 3	"	208 25
	Total for month		$2,426 47
	November, 1897.		
1	W. H. Kirkendall	Keeping team and barn rent	15 00
2	Thos. J. Guin	" " etc	16 50
3	C. T. Watkins	" "	15 00
4	W. H. Kirkendall	Expenses as superintendent	46 50
5	A. F. Reutinger	" collector	6 20
6	Gordon Moodie	" "	4 68
7	W. A. Empie	Repairing harness	1 70
8	F. A. Oberer	" " etc	13 50

ABSTRACT OF MONEY PAID—Continued.

No. of voucher.	To whom.	And for what paid.	Amount.
	November, 1897—Concluded.		
9	Jacob Dump	Repairing buggy	$9 00
10	John D. Ritter	Blacksmith work	16 15
11	Hoffman, Brown & Wilson	Floor tile for lock house at Millp't	2 20
12	Schoedinger & Fearn & Co	Hardware	63 95
13	Chas. E. Perkins	Expenses as chief engineer	2 25
	Pay roll, officers	Salaries	356 65
	" No. 1	Labor	155 50
	" No. 2	"	141 50
	" No. 3	"	302 12
	Total for month		$1,168 40
	December, 1897.		
1	W. H. Kirkendall	Expenses as superintendent	$47 25
2	"	Keeping stock and telegrams	17 50
3	Thos. J. Guin	" telephone	16 50
4	C. T. Watkins	"	15 00
5	Robert Morris	Right of way out, as per contract	20 00
6	Geo. E Barch	Expenses as collector	7 03
7	R. H. McIninch	Veterinary services to State mules	9 50
8	J. C. Hibbs & Co	Wheelbarrow	1 25
9	Geo E. Breese	Lumber	123 83
10	S. N. Cutler & Son	" and hardware	21 20
11	Geo. Herrnstine	"	4 48
12	Chas. E. Perkins	Expenses as chief engineer	3 75
13	Wm. Parkhurst	Office rent, light, fuel, telephone	84 00
	Pay roll, officers	Salaries	356 65
	" No. 1	Labor	76 50
	" No. 2	"	525 00
	" No. 3	"	158 75
	Total for month		$1,488 19
	January, 1898.		
1	W. H. Kirkendall	Expenses as superintendent	47 00
2	"	Keeping team and stable rent	57 00
3	Thos. J. Guin	" telephone	18 00
4	Chas. T. Watkins	"	15 00
5	C. H. Barbee	Expenses as collector	15 15
6	J. G. Hayes	Lumber	64 70
7	W. W. Franklin	Repairing levee at Millport	100 00
8	O. E. Niles	Cement	1 00
9	Moses & Moyst	Blacksmith work	13 50
10	Wm. Parkhurst	Expenses as collector	8 06
11	Schoedinger, Fearn & Co	Hardware	9 25
12	W. T. McLean	Expenses as secretary	5 70

ABSTRACT OF MONEY PAID—Continued.

No. of voucher.	To whom.	And for what paid.	Amount.
	January, 1898—Concluded.		
13	Chas. E. Perkins	Expenses as chief engineer	$3 00
14	Gordon Moodie	Office rent	36 00
15	T. E. Cromley	Lumber	9 00
	Pay roll, officers	Salaries	356 65
	" No. 1	Labor	147 15
	" No. 2	"	197 00
	" No. 3	"	144 87
	Total for month		$1,248 03
	February, 1898.		
1	W. H. Kirkendall	Expenses as superintendent	49 00
2	J. T. Kirkendall	Keeping team	20 00
3	Thos. J. Guin	" etc	20 00
4	Chas. T. Watkins	"	20 00
5	Cahill Bros	Rubber boots	12 00
6	A. H. Reutinger	Expenses as collector, and coal	3 97
7	H. Crist & Son	Tinware and repairs	4 15
8	J. P. Gartner	Wheelbarrows	8 10
9	C. W. Smith	Hardware	69 12
10	N. Purdum	"	40 65
11	A. W. Search	Rep. berme bank on Pancake farm	100 00
12	Ed. Reece	Lumber	60 25
13	Jacob Bleile	"	6 15
14	Jas. T. Blaser	Paint and oil	29 45
15	H. Crist & Son	Tinners' supplies	7 10
16	Thos. McCoy	For earth used	5 20
17	Chas. E. Perkins	Expenses as chief engineer	3 00
	Pay roll, officers	Salaries	373 31
	" No. 1	Labor	234 50
	" No. 2	"	347 25
	" No. 3	"	219 12
	Total for month		$1,632 32
	March, 1898.		
1	J. T. Kirkendall	Keeping stock, etc	21 00
2	T. J. Guin	"	21 80
3	C. T. Watkins	"	20 00
4	Harry B. Morris	10 yards of stone for breaks	4 50
5	W. H. Kirkendall	Expenses as superintendent	68 00
6	Adams Express Co	Express on burlap bags	4 55
7	Andrew Dienst	Amount claimed for damages	17 75
8	Klein, Cohn & Hurtig	600 sacks	30 00

ABSTRACT OF MONEY PAID—Continued.

No. of voucher.	To whom.	And for what paid.	Amount.
	March, 1898—Concluded.		
9	Chas. E. Perkins	Expenses as chief engineer	$3 00
	Pay roll, officers	Salaries	373 31
	" No. 1	Labor	162 00
	" No. 2	"	251 00
	" No. 3	"	197 00
	Total for month		$1,173 91

ABSTRACT OF MONEY PAID

By Geo. H. Watkins, Superintendent Division No. 2, Subdivision No. 4, Ohio Canal, for Material and Labor for the Maintenance and Repair of the Public Works.

No. of voucher.	To whom.	And for what paid.	Amount.
	April, 1898.		
1	G. W. Clark	Lumber	$62 12
2	W. H. Kirkendall	Expenses as superintendent	40 00
3	L. B. James	Repairing break in canal	12 00
4	Chas. F. Eaton	Blacksmith work	3 75
5	J. T. Kirkendall	Keeping stock, etc	20 75
6	Wm. Parkhurst	Expenses as collector	1 68
7	N. G. Davenport	Lumber	128 63
8	C. T. Watkins	Keeping stock	20 00
9	Thos. J. Guin	"	20 00
10	C. Benford & Son	Hardware	75 12
11	Geo. W. Watkins	Expenses as superintendent	33 75
12	Schoedinger, Fearn & Co	Hardware	89 91
13	Chas. E. Perkins	Expenses as chief engineer	5 00
	Pay roll, officers	Salaries	481 64
	" No. 1	Labor	608 45
	" No. 2	"	344 50
	" No. 3	"	71 25
	" No. 4	"	6 00
	" No. 5	"	111 05
	" No. 6	"	389 55
	" No. 7	"	186 25
	" No. 8	"	442 25
	" No. 9	"	250 48
	Total for month		$3,404 13
	May, 1898.		
1	J. F. Schleyer	Coal for dredge	18 00
2	Geo. H. Fickardt & Son	Paints, glass, etc	20 72
3	" "	Machine oil, etc	17 00
4	C. Benford & Son	Hardware	11 10
5	J. L. Brown	Livery	29 00
6	Chas. Clelland	Fixing breaks on canal	40 00
7	W. H. Kirkendall	Keeping team	20 00
8	The Fish Stone Co	Lumber	18 81
9	E. Murphy	Blacksmith work	2 75
10	Thos. Kellhofer	Hardware	2 55
11	Vaometer & Reid	Blankets	16 00
12	Cahill Bros	Rubber boots	13 50
13	John D. Ritter	Horseshoeing	21 95
14	W. H. Reed & Co	Lumber	58 82
15	Thos. J. Guin	Keeping team	20 00
16	J. P. Gardner	Wheelbarrows	10 80
17	C. T. Watkins	Keeping team	20 00
18	W. F. Ambrose	Repairing harness	6 45
19	John Miller	Blacksmith work	18 80
20	John W. Lewis	Livery	86 00
21	W. H. Stoker	"	2 50

ABSTRACT OF MONEY PAID—Continued.

No. of voucher.	To whom.	And for what paid.	Amount.
	May, 1898—Concluded.		
22	Seeds & McLelland	Fixing breaks on canal	$200 00
23	George F. Shoaf	"	68 00
24	Jerry Clemens	"	45 00
25	Schoedinger, Fearn & Co	Hardware	6 40
26	Geo. H. Watkins	Expenses as superintendent	39 45
27	Chas. E. Perkins	" chief engineer	3 00
28	Fallen & McManamy	Restoring banks on Circleville feed.	782 95
29	W. H. Kirkendall	Extra ex. Col'm's, forem., May 17-30	16 00
30	C. A. Goddard	Bal. of acct. for use of horse & buggy for 32 mos. at $10 per month	270 00
	Pay roll, officers	Salaries	364 98
	" No. 1	Labor	553 95
	" No. 2	"	683 60
	" No. 3	"	540 45
	" No. 4	"	245 80
	" No. 5	"	38 50
	" No. 6	"	610 40
	" No. 7	"	668 00
	" No. 8	"	413 78
	" No. 9	"	489 25
	Total for month		$6,444 26
	June, 1898.		
1	W. H. Kirkendall	Keeping team and expenses	42 00
2	Jacob Bleile	Lumber	7 09
3	G. F. Schleyer	Coal	41 40
4	Geo. H. Fickardt & Son	Oil for dredge	2 75
5	Geo. W. Clark	Lumber	21 20
6	John McEwing	Hardware and labor	24 44
7	G. Hartmeyer	Duck for covering boat	1 37
8	J. L. Brown	Livery	6 00
9	John H. Oty	Rope	6 84
10	Schoedinger, Fearn & Co	Hardware	10 58
11	C. Benford & Son	"	34 62
12	W. H. Albaugh & Co	Livery	33 50
13	W. A. Empie	Harness	2 25
14	M. F. Reiche	Hardware	4 50
15	R. C. Sherman	Dirt, etc	15 00
16	Ed. Reed	Lumber	51 55
17	"	"	26 25
18	Jacob Doster	Blacksmith work	56 95
19	N. Purdum & Co	Hardware	62 71
20	Jacob Dump	Blacksmith work	5 50
21	Thomas Guin	Keeping team	20 00
22	E. Humphrey	Repairing breaks	83 99
23	G. F. Lenman	Lumber	40 49
24	Walter Journey	Blacksmith work	1 75
25	J. C. Hibbs & Co	Hardware	28 48
26	C. T. Watkins	Keeping team	20 00
27	H. C. Simpson	Lumber	36 28

ABSTRACT OF MONEY PAID—Continued.

No. of voucher.	To whom.	And for what paid.	Amount.
	June, 1898—Concluded.		
28	Jno. Dice	Livery	$9 00
29	Samuel Bachtell	Traveling expenses as asst. engineer	2 00
30	Chas. E. Perkins	" " chief "	2 50
31	Wm. T. McLean	"	4 35
32	Geo. H. Watkins	Expenses as superintendent	40 00
	Pay roll, officers	Salaries	369 98
	" No. 1	Labor	814 00
	" No. 2	"	105 75
	" No. 3	"	276 50
	" No. 4	"	874 00
	" No. 5	"	281 50
	" No. 6	"	534 75
	Total for month		$3,501 82
	July, 1898.		
1	C. Benford & Son	Hardware	24 39
2	W. H. Albaugh & Co	Livery	8 00
3	Wm. Parkhurst	Expenses as collector	2 07
4	Geo. H. Fickardt & Son	Supplies for dredge	13 40
5	O. E. Niles	Cement	3 00
6	J. F. Schleyer	Coal	10 00
7	W. H. Kirkendall	Keeping team	20 00
8	"	Expense account	13 29
9	Ed. Reed	Lumber	29 29
10	Thos. Kellhofer	Hardware	2 60
11	Thos. J. Guin	Keeping team and telephone mes'ge	21 60
12	J. M. Davis	Oils, etc	7 40
13	W. A. Wynn	Dirt for repairing canal	5 00
14	J. C. Hibbs & Co	Hardware	6 72
15	Cuppett & Webb	Lumber	13 09
16	S. N. Cutler & Son	" and hardware	5 65
17	C. T. Watkins	Keeping team and telegraphing	21 15
18	J. B. Houser	Livery	6 00
19	Ira A. Keller	"	1 00
20	Jacob Bleile	Lumber	8 82
21	Schoedinger, Fearn & Co	Hardware	35 12
22	Samuel Bachtell	Traveling exp. as assistant engineer	6 50
23	Chas. E. Perkins	" " chief "	10 00
24	Geo. H. Watkins	" " superintendent	38 50
	Pay roll, officers	Salaries	369 98
	" No. 1	Labor	662 00
	" No. 2	"	342 75
	" No. 3	"	471 00
	" No. 4	"	529 91
	" No. 5	"	88 99
	Total for month		$2,727 22

ABSTRACT OF MONEY PAID—Continued.

No. of voucher.	To whom.	And for what paid.	Amount.
	August, 1898.		
1	John McEwing	Repairs for dredge	$109 76
2	James H. Lynch	Brooms, bags, etc	7 52
3	W. H. Kirkendall	Keeping team, telegrams, etc	25 00
4	C. Benford & Son	Hardware	21 24
5	Geo. H. Fickardt & Son	Paint and oils	12 40
6	C. Weldon	1 barrel cement	1 35
7	Moses Moyst	Blacksmith work	10 55
8	J. F. Schleyer	Coal for dredge	5 00
9	N. Purdum & Co	Hardware and paint	45 59
10	W. A. Leffler	Wagon repairs	2 75
11	John D. Ritter	Shoeing	7 95
12	F. H. Oberer	Harness, etc	14 65
13	Ed. Reed	Timber and hauling of same	38 37
14	Thos. J. Guin	Keeping team and telephone mes	21 60
15	C. T. Watkins	"	20 00
16	Geo H. Watkins	Expenses as superintendent	40 50
17	J. M. Davis	Putty and drugs	85
18	C. E. Perkins	Expenses as chief engineer	1 25
19	N. G. Davenport	Lumber	84 18
	Pay roll, officers	Salaries	369 98
	" No. 1	Labor	369 00
	" No. 2	"	643 50
	" No. 3	"	313 50
	" No. 4	"	124 00
	Total for month		$2,240 49
	September, 1898.		
1	John Smith	Timber for aqueduct and dredge	14 04
2	J. A. McLaughlin & Bro	Putting tires on buggy	5 00
3	Edward Smith	Earth for repairing canal	35 00
4	W. H. Kirkendall	Caring for team, etc	26 00
5	Robt. Morris	Right of way	20 00
6	C. T. Watkins	Caring for team	20 00
7	Geo. H. Watkins	Expenses as superintendent	37 00
8	Thos. Guin	Caring for team	20 00
9	Norfolk & Western Ry	Timber	18 67
10	Schoedinger, Fearn & Co	Hardware	40
11	Ed. Reed	Lumber	23 54
12	Chas. E. Perkins	Expenses as chief engineer	2 00
	Pay roll, officers	Salaries	369 98
	" No. 1	Labor	202 25
	" No. 2	"	195 50
	" No. 3	"	237 00
	Total for month		$1,226 38

ABSTRACT OF MONEY PAID

By Chas. T. Hayman, Superintendent Division No. 3, Miami and Erie Canal, for Material and Labor for the Maintenance and Repair of the Public Works

No. of voucher.	To whom.	And for what paid.	Amount.
	October, 1897.		
1	W. A. Gregg	Expense account	$ 4 90
2	Chas. T. Hayman	" "	66 55
3	Wash. Irwin	Keeping team for State boat No. 1	20 65
4	D. Maher	Livery	20 00
5	M. Jokers	Material for State boat No. 1	1 08
6	City and Sub. Tel. Ass'n	Telephone	25 40
7	J. W. Sullivan	Expense account	2 85
8	"	Rent	8 34
9	French Whitehead	"	8 00
10	Hamilton Boat Co	Teams	36 75
11	J. W. Gorman	Rent	6 00
12	Jas. K. Aylward	Blacksmith work	1 50
13	H. F. Eyler	Keeping team	20 90
14	C. W. Sutphin	Expense account	60
15	R. V. Denny	" "	16 60
16	Ben Smith	Teams	72 00
17	Denny & Simpson	Lumber	16 00
18	J. W. Montgomery	"	154 27
19	Wm. F. Gillham	Cement	2 70
20	C. H. Bergen	Blacksmith work	3 40
21	C. C. Fouts	Hardware	33 05
22	The La Tourrette Mch. Co	"	6 82
23	Theo. Ritter	Repairing harness, etc	3 45
24	A. F. Meeker	Coal for dredge No. 6	90 05
25	Chas. Buehmer	Material for dredge No. 6	7 50
26	Wm. Sheedy	Expense account	2 95
27	Chas. A. Gump & Co	Material for dredge No. 6	7 68
28	Standard Oil Co	Oil " "	10 90
29	Geo. J. Roberts & Co	Material " "	2 15
30	Dayton Globe Iron Works Co	" " "	9 68
31	Chas. E. Perkins	Expenses as chief engineer	10 50
	Pay roll, officers	Salaries	494 17
	" No. 1	Labor	293 00
	" No. 2	"	284 00
	" No. 3	"	139 00
	" No. 4	"	299 13
	Total for month		$2,182 52
	November, 1897.		
1	W. A. Gregg	Expense account	5 90
2	Chas. T. Hayman	" "	64 70
3	Wash. Irwin	Keeping team for State boat No. 1	24 00
4	D. Maher	Livery	20 00
5	Jos. B. Blettner & Co	Material for dredge No. 6	1 80
6	World's Fair Wrecking Co	Lumber	9 40
7	Jos. T. Kaelin	Shoeing	2 00
8	J. H. Kohrmescher & Co	Material for State boat No. 1	16 50

ABSTRACT OF MONEY PAID—Continued.

No. of voucher.	To whom.	And for what paid.	Amount.
	November, 1897—Concluded.		
9	F. C. Schwarz	Material for dredge No. 6	$ 1 94
10	J. S. Sullivan	Expense account	3 50
11	"	Rent	8 34
12	French Whitehead	"	8 00
13	J. W. Gorman	"	6 00
14	Jno. Messner	Repairs	75
15	H. F. Eyler	Keeping team State boat No. 2	26 00
16	The J. F. Bender & Bros. Co.	Lumber	4 08
17	Denny & Simpson	"	10 21
18	J. W. Montgomery	"	121 20
19	C. W. Sutphin	Expense account	10 38
20	R. V. Denny	" "	4 90
21	C. C. Fonts	Hardware	7 75
22	C. H. Bergen	Blacksmith work	8 35
23	Wm. Sheedy	Expense account	4 65
24	A. F. Meeker	Coal for dredge No. 6	26 36
25	Jas. Nolin	Material for dredge No. 6	1 50
26	Chas. Buehm	" " "	4 24
27	H. S. Conover	" " "	1 25
28	Geo. J. Roberts & Co	" " "	1 50
29	Chas. E. Perkins	Expenses as chief engineer	11 00
	Pay roll, officers	Salaries	494 17
	" No. 1	Labor	254 00
	" No. 2	"	317 00
	" No. 3	"	171 00
	" No. 4	"	87 50
	Total for month		$1,739 87
	December, 1897.		
1	W. A. Gregg	Expense account	8 05
2	Chas. T. Hayman	" "	63 70
3	Max Sierweld	Coal	5 00
4	E. Bowen	Material	4 41
5	D. Maher	Livery	20 00
6	City and Sub. Tel. Ass'n	Telephone	25 00
7	Wash. Irwin	Keeping team for State boat No. 1	20 00
8	J. W. Sullivan	Expense account	2 60
9	"	Rent	8 34
10	French Whitehead	"	8 00
11	J. W. Gorman	"	6 00
12	H. F. Eyler	Keeping team for State boat No. 2	20 00
13	C. W. Sutphin	Expense account	7 25
14	L. H. Corson	" "	97
15	W. T. McLean	Traveling expenses as secretary	7 20
16	Chas. E. Perkins	" " chief engineer	11 50
	Pay roll, officers	Salaries	539 17
	" No. 1	Labor	314 25
	Total for month		$1,070 74

ABSTRACT OF MONEY PAID—Continued.

No. of voucher.	To whom.	And for what paid.	Amount.
	January, 1898.		
1	W. A. Gregg	Expense account	$4 25
2	Chas. T. Hayman	"	63 75
3	City and Sub. Tel. Ass'n	Telephone	25 00
4	D. Maher	Livery	20 00
5	Wash. Irwin	Keeping team for State boat No. 1	22 00
6	Jno. G. Clause	Labor and material	50 00
7	J. W. Sullivan	Expense account	2 85
8	"	Rent	8 34
9	French Whitehead	"	8 00
10	Jno. Mueller	Coal	3 00
11	J. W. Gorman	Rent	6 00
12	H. F. Eyler	Keeping team for State boat No. 2	21 50
13	H. Campbell	Labor	4 00
14	Ben Smith	Teams and labor	90 00
15	McSherry Mfg. Co	Castings	18 58
16	T. M. Corson	Expense account	4 15
17	Denny & Simpson	Lumber	4 10
18	Chas. E. Perkins	Expense account	10 50
	Pay roll, officers	Salaries	494 17
	" No. 1	Labor	233 75
	" No. 2	"	157 25
	" No. 3	"	50 00
	" No. 4	"	75 00
	Total for month		$1,376 19
	February, 1898.		
1	W. A. Gregg	Expense account	13 05
2	Chas. T. Hayman	"	64 20
3	Geo. Cole	Material	16 00
4	D. Maher	Livery	20 00
5	Greg. G. Wright & Son	Repairs	15
6	Wash. Irwin	Keeping team for State boat No. 1	32 00
7	Jos. T. Kaelin	Blacksmith wk. for State boat No. 1	3 50
8	L. E. Doizoner	Harness repairs "	6 40
9	Johnson Bros. Hardware Co	Hardware	1 30
10	Emil. H. Guth	Blacksmith work	4 60
11	J. W. Sullivan	Expense account	11 90
12	"	Rent	8 34
13	French Whitehead	"	8 00
14	J. W. Gorman	"	6 00
15	H. F. Eyler	Keeping team, for State boat No. 2	20 50
16	Aug Soehner	Harness repairs "	4 65
17	T. H. Corson	Expense account	2 15
18	R. V. Denny	"	4 55
19	L. B. Cahill	Material	19 00
20	W. A. Sheets	Blacksmith work	7 40
21	Chas Buehmer	"	3 90
22	Samuel Bachtell	Expenses as ass't engineer	6 00
23	Chas. E Perkins	" chief "	14 00
	Pay roll, officers	Salaries	494 17

ABSTRACT OF MONEY PAID—Continued.

No. of voucher.	To whom.	And for what paid.	Amount.
	February, 1898—Concluded.		
	Pay roll No. 1	Labor	$177 50
	" No. 2	"	180 50
	" No. 3	"	50 00
	" No. 4	"	90 00
	Total for month		$1,269 76
	March, 1898.		
1	W. A. Gregg	Expense account	4 60
2	Chas. T. Hayman	"	64 75
3	City and Sub. Tel. Ass'n	Telephone	25 00
4	D. Maher	Livery	20 00
5	Wash. Irwin	Keeping team, State boat No. 1	24 00
6	E. Bowen	Tow-line for "	2 34
7	Johnson Bros. Hardware Co.	Hardw. for State bldg., Cincinnati	2 80
8	" "	" "	7 05
9	W. O. Tuttle	Plastering " "	75 00
10	The Morrison-Snodgrass Co.	D'rs & window frs., State bldg., Cin.	125 96
11	The Standard Mortar Co.	Mortar for State bldg., Cincinnati	3 70
12	Devere Electric Co.	Repairs to "	9 36
13	"	" "	1 66
14	Oliver Schlemmer	Plumbing for "	122 30
15	Wm. E. Touwley & Co	Lumber for "	33 94
16	W. C. Peale & Bro	Glass for "	11 70
17	"	Paint for State boat No. 1	24 19
18	"	" " 2	21 44
19	"	Paint for dredge and feeder No. 6	33 07
20	A. M. Vorhis	Livery	2 50
21	Lockland Lumber Co.	Lumber	1 40
22	Emil H. Guth	Blacksmith work	5 05
23	J. W. Sullivan	Expense account	4 03
24	"	Rent	8 34
25	French Whitehead	"	8 00
26	J. W. Gorman	"	6 00
27	H. F. Eyler	Keeping team for State boat No. 2	29 90
28	T. H. Corson	Expense account	1 80
29	Lockland Dry Dock Co.	Repairs on State boat No. 1	292 07
30	R. V. Denny	Expense account	23 40
31	C. C. Fouts	Hardware	2 80
32	Denny and Simpson	Lumber	28 98
33	Wm. Sheedy	Expense account	2 12
34	Geo. J. Roberts & Co	Repairs on dredge No. 6	62 42
35	Chas. E. Perkins	Expenses as chief engineer	10 25
36	S. Bachtell	" ass't "	4 00
	Pay roll, officers	Salaries	494 17
	" No. 1	Labor	297 50
	" No. 2	"	355 40
	" No. 3	"	59 00
	" No. 4	"	165 00
	Total for month		$2,476 99

ABSTRACT OF MONEY PAID—Continued.

No. of voucher.	To whom.	And for what paid.	Amount.
	April, 1898.		
1	W. A. Gregg	Expense account	$8 55
2	City and Sub. Tel. Ass'n	Telephone	25 55
3	Chas. T. Hayman	Expense account	71 35
4	The Morrison-Snodgrass Co.	Material for State Build. Cincinnati	17 85
5	Johnson Bros. Hardware Co.	" "	14 12
6	W. C. Peale & Bro	" "	10 05
7	Aug. Peters	" "	8 60
8	The Buckeye Foundry Co.	" "	4 38
9	The Jacob Friend Roofing Co.	" "	1 49
10	F. Krumdeick	Repairs	21 00
11	The Buckeye Wreck. & S. Co.	Lumber	391 30
12	Wash. Irwin	Keeping team for State boat 1, exp.	38 00
13	M. Jokers	Material " "	1 20
14	Wm. Henser	Repairs " "	2 50
15	F. C. Blikle & Co.	Material " "	75
16	D. Maher	Livery	20 00
17	Carthage Buggy & Wag. Works	Bolts	50
18	J. W. Sullivan	Expense account	2 20
19	"	Rent	8 34
20	French Whitehead	"	8 00
21	J. W. Gorman	"	6 00
22	H. F. Eyler	Keeping team for State boat No. 2	25 80
23	John Nolin	Blacksmith work "	2 35
24	Aug. Benninghofen	Cement	1 00
25	Jos. Freshman	Sand	90
26	T. H. Corson	Expense account	2 15
27	R. V. Denny	"	4 65
28	Jno. Arpp	Tapping sewer	12 20
29	C. C. Fouts	Hardware	143 85
30	Denny & Simpson	Lumber	85 97
31	J. W. Montgomery	"	669 32
32	Ben Smith	Teams	763 50
33	L. F. Anderson's Sons	Lumber	17 32
34	Wm. Sheedy	Expense account	1 25
35	Chas. Buehner	Labor and material for dredge No. 6	77 17
36	H. S. Conover	Material for dredge No. 6	3 15
37	Jas. C. Blood	" "	2 25
38	P. P. Maxwell	Coal "	33 06
39	Geo. J. Roberts & Co.	Repairs "	4 00
40	Standard Oil Co.	Oil "	4 50
41	Chas. E. Perkins	Expenses as chief engineer	13 00
	Pay roll, officers	Salaries	494 17
	" No. 1	Labor	774 00
	" No. 2	"	403 50
	" No. 3	"	290 00
	" No. 4	"	145 00
	" No. 5	"	247 25
	" No. 6	"	198 83
	Total for month		$5,081 87

ABSTRACT OF MONEY PAID—Continued.

No. of voucher.	To whom.	And for what paid.	Amount.
	May, 1898.		
1	W. A. Gregg	Expense account	$12 25
2	Chas. T. Hayman	"	67 95
3	Jno. W. Kruse	Painting State building, Cincinnati	95 00
4	Gus. Clark	Brick for " "	4 00
5	Devere Electric Co	Material " "	9 19
6	The Geo. F. Otte Co	" " "	25 73
7	C. & A. Kreimer Co	" " "	8 00
8	The Rob't Mitchell Furn. Co	" " "	27 25
9	Thomas M. Hays	" " "	43 33
10	Wm. Gottman	" " "	3 70
11	The Morrison-Snodgrass Co	" " "	4 40
12	The Mosler Safe Co	" " "	12 50
13	Johnson Bros. Hardware Co	Hardware	11 49
14	D. Maher	Livery	20 00
15	Wash. Irwin	Keeping team for State boat No. 1	25 65
16	Jos. T Kaelin	Shoeing " "	2 00
17	John Mueller	Coal	2 75
18	J. W. Sullivan	Expense account	4 15
19	"	Rent	8 34
20	French Whitehead	"	8 00
21	J. W. Gorman	"	6 00
22	Winfred G. Johnson	Blacksmith work	3 25
23	Theo. Ruetinger	Teams	6 00
24	H. F. Eyler	Keeping teams for State boat No. 2	27 25
25	Aug. Benninghofen	Cement	10 17
26	T. H. Corson	Expense account	5 60
27	R. V. Denny	"	4 05
28	Denny & Simpson	Lumber	16 40
29	Ben Smith	Teams	36 00
30	C. C. Fouts	Hardware	12 93
31	Johnson & Co	Paint	3 00
32	Herman & Carney	Blacksmith work	6 43
33	L. G. Anderson's Sons	Lumber	196 44
34	P. P Maxwell	Coal	64 38
35	H. S. Conover	Material for dredge No. 6	7 55
36	Chas. Buehner	" "	5 05
37	Margaret & Christian Holwager	Damage claim	50 00
38	Grove & Catrow	Coal for dredge No 4	5 09
39	The H. Wantz Lumber Co	Lumber "	19 00
40	The Standard Oil Co	Oil "	4 50
41	Chas. A. Gump & Co	Material "	2 20
42	M. W. Chambers	Freight on lumber	29 40
43	M. J. Hosler	Lumber	81 76
44	Wm. M. Hahn	"	245 72
45	Chas. E. Perkins	Expenses as chief engineer	9 75
46	Thos. V. Lyon, Jr	Material and labor furnished	8 75
	Pay roll, officers	Salaries	494 17
	" No. 1	Labor	329 75
	" No. 2	"	284 00

ABSTRACT OF MONEY PAID—Continued.

No. of voucher.	To whom.	And for what paid.	Amount.
	May, 1898—Concluded.		
	Pay roll No. 3	Labor	$83 25
	" No. 4	"	254 50
	" No. 5	"	85 00
	" No. 6	"	80 00
	Total for month		$2,873 02
	June, 1898.		
1	W. A. Gregg	Expense account	5 65
2	Chas. T. Hayman	"	68 00
3	City and Sub. Tel. Ass'n	Telephone	25 00
4	D. Maher	Livery	20 00
5	Johnson Bros. Hardware Co.	Hardware for State boat No. 1	11 12
6	Wash. Irwin	Keeping team for State boat No. 1	20 60
7	M. Jokers	Brooms " "	1 20
8	L. E. Dotzauer	Repairs " "	1 70
9	J. W. Sullivan	Expense account	3 35
10	"	Rent	8 34
11	French Whitehead	"	8 00
12	J. W. Gorman	"	6 00
13	C. C. Fouts	New roof on Franklin lock house, etc	65 25
14	Arthur Funk	Repairing Middletown lock house	1 50
15	Benj Smith	Teams	12 00
16	R. V Denny	Expense account	4 60
17	T. H. Corson	"	1 10
18	Herman & Carney	Blacksmith work	9 55
19	The Blair & Shartle Mach. Co.	Spikes	9 03
20	Denny & Simpson	Lumber	5 94
21	J. W. Montgomery	"	90 82
22	H. F. Eyler	Keeping team for State boat No. 2	21 10
23	Thos. McDermott	Expense account Dredge No. 6	1 57
24	Wm. Sheedy	" "	3 54
25	J. V. Hankinson	Lumber for "	4 35
26	Chas. Buehner	Material, labor for "	16 40
27	P. P. Maxwell	Coal "	47 58
28	H. S. Conover	Material "	2 15
29	A. F. Meeker	Teams "	5 50
30	The H. Wantz Lumber Co	Lumber " 4	7 68
31	Grove & Catrou	Coal "	40 47
32	Standard Oil Co	Oil " 6	4 50
33	Chas. A. Gump	Material "	2 25
34	Geo. J. Roberts & Co	" "	14 50
35	Clerk of Montgomery Co., O.	Costs in case No. 19,520	25 60
36	Chas. E Perkins	Expenses as chief engineer	11 00
	Pay roll, officers	Salaries	564 17
	" No. 1	Labor	284 00
	" No. 2	"	270 50

ABSTRACT OF MONEY PAID—Continued.

No. of voucher.	To whom.	And for what paid.	Amount.
	June, 1898—Concluded.		
	Pay roll No. 3	Labor	$92 50
	" No. 4	"	343 38
	" No. 5	"	270 25
	Total for month		$2,411 74
	July, 1898.		
1	W. A. Gregg	Expense account	4 95
2	Chas. T. Hayman	"	66 65
3	J. G. McGarvey & Bro	Water rebate	3 00
4	E. Bowen	Material	4 20
5	The Buckeye Wreck. & S. Co	Lumber	549 61
6	D. Maher	Livery	20 00
7	City and Sub. Tel. Ass'n	Telephone	15 00
8	Hamilton Canal Boat Co	Freight on lumber	32 00
9	Wash. Irwin	Keeping State boat team No. 1	20 30
10	Jos. T. Kaelin	Shoeing team No. 1	3 00
11	Newbauer & Roos	Repairs	90
12	Johnson Bros. Hardware Co	Hardware	3 00
13	J. W. Sullivan	Expense account	3 05
14	"	Rent	8 34
15	French Whitehead	"	8 00
16	Emil H. Guth	Blacksmith work	2 25
17	A. M. Vorhis	Team	1 50
18	Lockland Lumber Co	Lumber	11 63
19	J. W. Gorman	Rent	6 00
20	Jno. Messner	Blacksmith work	1 70
21	Wm. E. Hoel	Repairs to Hamilton lock house	23 12
22	Aug. Benninghofer	Cement	3 00
23	T. H. Corson	Expense account	2 23
24	R. V. Denny	"	10 85
25	Herman & Carney	Blacksmith work	4 55
26	Denny & Simpson	Lumber	3 52
27	H. F. Eyler	Keeping team for State boat No. 2	21 65
28	Theo. Ritter	Harness repairs, etc	8 50
29	H. S. Conover	Oil, etc. for Dredge No. 6	3 75
30	L. G. Anderson's Sons	Lumber " "	13 99
31	Chas. Buehner	Material " "	9 25
32	P. P. Maxwell	Coal " "	74 62
33	Grove & Catrow	" " No. 4	10 40
34	Chas. E. Perkins	Expense account as chief engineer	9 00
35	Samuel Bachtell	" " asst. "	10 00
	Pay roll, officers	Salaries	519 17
	" No. 1	Labor	284 00
	" No. 2	"	269 75
	" Nos. 3 and 4	"	392 62
	Total for month		$2,439 05

ABSTRACT OF MONEY PAID—Continued.

No. of voucher.	To whom.	And for what paid.	Amount.
	August, 1898.		
1	W. A. Gregg	Expense account	$3 25
2	Chas. T. Hayman	"	64 35
3	Wm. E. Touwley & Co	Lumber	14 53
4	Johnson Bros. Hardware Co	Hardware	9 00
5	Neubauer & Roos	Blacksmith work	4 45
6	C. Bowen	Material for State boat No. 1	4 08
7	Wash. Irwin	Keeping team for "	31 00
8	D. Maher	Livery	20 00
9	The Buckeye Wreck & S. Co	Lumber	6 00
10	Lockland Daily Packet Line	Labor	10 00
11	J. W. Sullivan	Expense account	4 45
12	"	Rent	8 34
13	French Whitehead	"	8 00
14	J. W. Gorman	"	6 00
15	T. H. Corson	Expense account	2 15
16	Herman & Carney	Blacksmith work	4 51
17	R. V. Denny	Expense account	13 50
18	C. C. Fouts	Material for St. boat 2, & dredge 6	22 65
19	Denny & Simpson	Lumber	3 45
20	Ben Smith	Teams	306 00
21	H. F. Eyler	Keeping team for State boat No. 2	21 00
22	Wm. Sheedy	Mdse. for dredge No. 6	3 25
23	Chas. Buchner	Labor and material for dredge No. 6	19 32
24	H. S. Conover	Oil for dredge No. 6	5 60
25	P. P. Maxwell	Coal "	80 25
26	L. G. Anderson	Lumber	87 52
27	Standard Oil Co	Oil for dredge No. 6	4 00
28	Dayton Globe Iron Works Co	Material "	49 32
29	The Dayton Steam Boiler Co	" and labor for dredge No. 6	8 25
30	The P. Hayden S. H. Co	Chain for dredge No. 6	56 81
31	Samuel Bachtell	Traveling exp. as ass't engineer	6 00
32	C. E. Perkins	" chief "	10 50
	Pay roll, officers	Salaries	519 17
	" No. 1	Labor	297 75
	" No. 2	"	293 00
	" No. 3	"	330 50
	" No. 4	"	285 88
	" No. 5	"	75 00
	Total for month		$2,698 83
	September, 1898.		
1	W. A. Gregg	Expense account	3 85
2	Chas. T. Hayman	"	66 40
3	City and Sub. Tel. Ass'n	Telephone	25 00
4	D. Maher	Livery	20 00
5	Wm. E. Touwley & Co	Lumber	42 00
6	The Buckeye Wreck. & S. Co	"	9 00
7	John Grossin's Sons	Hardware	2 50
8	Johnson Hardware Co	"	1 05
9	Wash. Irwin	Keeping team for State boat No. 1	20 00

ABSTRACT OF MONEY PAID—Continued.

No. of voucher.	To whom.	And for what paid.	Amount.
	September, 1898—Concluded.		
10	M. Jokers	Brooms for State boat No. 1	$1 70
11	A. M. Vorhis	Team	3 00
12	Lockland Lumber Co	Lumber	96
13	Haldeman Paper Co	Sacks	3 50
14	J. W. Sullivan	Expense account	2 85
15	"	Rent	8 34
16	French Whitehead	"	8 00
17	J. W. Gorman	"	6 00
18	Carney & Meehan	Blacksmith work	2 20
19	C. C. Fouts	Hardware	1 80
20	T. M. Corson	Expense account	1 38
21	R. V. Denny	"	4 00
22	Wm. Sheedy	"	35
23	H. F. Eyler	Keeping team for State Boat No. 2	21 50
24	Jno. Nolin	Blacksmith work	4 50
25	Chas. Buchner	Material and labor for dredge No. 6	11 36
26	H. S. Conover	Oil, etc., for dredge No. 6	6 90
27	P. P. Maxwell	Coal "	78 74
28	Chas. E. Perkins	Expenses as chief engineer	10 00
	Pay roll, officers	Salaries	519 17
	" No. 1	Labor	284 00
	" No. 2	"	285 50
	" No. 3	"	258 63
	" No. 4	"	75 00
	Total for month		$1,789 18
	October, 1888.		
1	W. A. Gregg	Expense account	4 95
2	Chas. T. Hayman	"	65 95
3	Wash. Irwin	Keeping team for State boat No. 1	20 00
4	D. Maher	Livery	20 00
5	E. Bowen	Tow-line, State boat No. 1	2 40
6	Jos. T. Kaelen	Shoeing team "	3 00
7	Chas. Kobmann	Material for "	1 25
8	Oliver Schlemmer	Plumbing, collector's office	1 75
9	City and Sub. Tel. Ass'n	Telephone	16 00
10	Carthage Buggy & Wagon Wks	Bolts	75
11	Lockland Dry Dock Co	Repairs	2 00
12	J. W. Sullivan	Expense account	3 50
13	"	Rent	8 34
14	French Whitehead	"	8 00
15	J. W. Gorman	"	6 00
16	Winfred G. Johnson	Blacksmith work	2 00
17	H. F. Eyler	Keeping team for State boat No. 2	20 00
18	T. N. Corson	Expense account	2 15
19	Carney & Meehan	Blacksmith work	75
20	C. C. Fouts	Hardware	3 30
21	Denny & Simpson	Lumber	30 28
22	J. W. Montgomery	"	1,537 20
23	Wm. Sheedy	Expense account	1 59

ABSTRACT OF MONEY PAID—Continued.

No. of voucher.	To whom.	And for what paid.	Amount.
	October, 1898—Concluded.		
24	H. S. Conover	Oil, etc., for dredge No. 6	$5 31
25	Chas. Buchner	Work and material for dredge No. 6	11 00
26	P. P. Maxwell	Coal for dredge No. 6	77 69
27	S. T. & G. A. Gebhart	Material "	3 06
28	Standard Oil Co	Oil for dredge No. 6	4 50
29	Samuel Bachtell	Expenses as ass't engineer	6 00
30	Chas. E. Perkins	" chief "	11 00
	Pay roll, officers	Salaries	519 17
	" No. 1	Labor	306 50
	" No. 2	"	306 13
	" Nos. 3 and 4	"	338 25
	Total for month		$3,349 77

ABSTRACT OF MONEY PAID

By John O'Connor, Superintendent Division No. 3, Subdivision No. 2, Miami and Erie Canal, for Material and Labor for the Maintenance and Repair of the Public Works.

No. of voucher.	To whom.	And for what paid.	Amount.
	August, 1897.		
1	Lewis G. Davis	Expenses of collector's office, Piqua	$ 1 75
2	Logan C. Miller	" " " Dayton	5 65
3	Ed. McConnell	Keeping team and other expenses	30 10
4	Hugh Brennan	" " "	25 00
5	James McCabe	For the use of steam engine	160 00
6	Standard Oil Co	2 bbls gas'e for steamboat Columbia	8 24
7	Callender & Patterson	Tools for Brennan	4 75
8	D. Leonhard	Harness repairs	1 85
9	Frank Snell	Material for dredge 4	27 70
10	Brandriff & Hedges	Supplies "	2 55
11	Tischer & Reisinger	Hardware for Brennan's boat	14 45
12	A. Zollinger	Cement for Turtle creek culvert	36 00
13	Globe Iron Works	Castings	4 80
14	Alex. Fischer	For use of derrick	31 50
15	"	Derrick rope	12 00
16	W. H. Angle	Hardware for McConnell	10 67
17	Brandriff & Hedges	Supplies "	2 35
18	Jno. Benkert	Harness repairs	2 75
19	H. Icenbarger	Scantling for feed. gates, P. Jefferson	2 25
20	H. L. Hill	1 pair rubber boots	2 50
21	H. Confer	Blacksmith work for Brennan	1 25
22	James Burt	Pair lock gates	75 00
23	Wm. McDaniel	Hauling men to work	12 60
24	E. Burt	" "	9 40
25	Jas. McCabe	Stone for Holt's creek	57 75
26	James Rice	Earth for fill	5 00
27	C. L. Wood	Lumber for dredge No. 4	103 59
28	H. P. Bailey	" Turtle creek culvert	361 09
29	Sarah Wise	Timbers for derrick	10 00
30	C. L. Wood	Lumber for flume at Turtle creek	107 00
31	A. Gebhart	" Miami aqueduct	35 84
32	Houck & Ely	" " "	8 00
33	Greaff Bros	Livery at Piqua	11 50
34	Jesse Short	" Huntsville	4 00
35	"	" "	12 50
36	T. F. Shaw	" Sidney	3 75
37	W. P. Callahan	Machine work	3 40
38	Jno. Bushnell	Horseshoeing	2 10
39	C F. Williamson	Blacksmith work	8 80
40	Robbins & Moore	Livery at Piqua	31 50
41	Jno. O'Connor, Jr	" Dayton	9 25
42	Makley & Ryder	Horseshoeing at Dayton	2 65
43	C. N. Cook	Blacksmith work	28 80
44	C. Hardesty	Coal for dredge No. 4	37 00
45	Jno. O'Connor	Expenses as superintendent	67 50
46	Chas. E. Perkins	" chief engineer	9 75
47	Samuel Bachtell	" assitant engineer	14 50
48	C. C. Richardson	Use of boat for inspection trip	150 00

ABSTRACT OF MONEY PAID—Continued.

No. of voucher.	To whom.	And for what paid.	Amount.
	August, 1897—Concluded.		
	Pay roll, officers	Salaries	$443 33
	" No. 1	Labor	360 25
	" No. 2	"	684 09
	" No. 3	"	284 88
	" No. 4	"	644 25
	" No. 5	"	164 75
	Total for month		$4,151 93
	September, 1897.		
1	Logan C. Miller	Expenses as collector at Dayton	8 00
2	Hugh Brennan	Keeping team and other expenses	25 30
3	Ed. McConnell	" " "	28 02
4	James Burt	Expenses as carpenter	5 50
5	Makley & Ryder	Horseshoeing for Brennan	1 50
6	Tischer & Reisinger	Hardware and tools for Brennan	10 00
7	E. E. Lears	Repairing pump at lock house	2 50
8	W. H. Angle	Hardware for McConnell	3 11
9	D. C. Statler & Co	Coal for dredge No. 4	18 15
10	W. H. Angle	Hardware for dredge No. 4	12 27
11	Frank Schnell	Draging " "	3 50
12	Thos. McDermott	Expenses " "	1 60
13	Delmer Babcock	Livery at Lakeview	1 35
14	Greaff Bros	" Piqua	3 00
15	Sam. Raper	" Dayton	2 00
16	Robbins & Moore	" Piqua	27 50
17	Jesse Short	" Huntsville	4 00
18	Alex. Fisher	Derrick & horse at Newburn culver	96 25
19	James H. McCabe	Use of steam engine "	300 20
20	Samuel Avey	Boating stone for Newburn culvert	32 00
21	Geo. W. McCabe	Stone " "	98 25
22	D. C. Statler & Co	" " "	80 00
23	S. Zolinger & Co	Cement " "	180 30
24	Wm. A. Snypp	Sand " "	42 60
25	H. P. Bailey	Lumber " "	36 44
26	Chas A. Hetzler	Supplies for McConnell's boat	10 85
27	Houck & Ely	Lum. for Tippecanoe lock & M R. d.	92 97
28	M. J. Hosler	" lock gates at Dayton	49 36
29	"	" Miami aqueduct	508 14
30	John O'Connor	Expenses as superintendent	67 50
31	C. E. Perkins	" chief engineer	11 00
	Pay roll, officers	Salaries	479 33
	" No. 1	Labor	460 12
	" No. 2	"	483 50
	" No. 3	"	285 25
	" No. 4	"	1,028 25
	" No. 5	"	404 25
	Total for month		$4,903 86

ABSTRACT OF MONEY PAID—Continued.

No. of voucher.	To whom.	And for what paid.	Amount.
	October, 1897.		
1	Logan C. Miller	Expenses as collector at Dayton	$5 30
2	Lewis G. Davis	" Piqua	3 60
3	Ed. McConnell	Feeding team and other expenses	24 00
4	Hugh Brennan	" "	25 20
5	H. M. Manley	Medicine and treatment for mule	4 00
6	D. Leonhard & Son	Repairing harness	60
7	Tischer & Reisinger	Hardware for Brennan's boat	6 60
8	Chas. Hetzler	" McConnell's boat	3 65
9	W. H. Angle	" "	18 94
10	W. M. Whitmore	Cement for Brennan	6 30
11	Michael Moran	Livery at Dayton, in August	14 00
12	Jesse Short	" Huntsville	13 00
13	Greaff Bros	" Piqua	10 50
14	H. W. Rairdon	" New Bremen	1 75
15	W. F. Robbins	" Piqua	23 00
16	Ed. McVay	" Sidney	1 50
17	W. S. Southard	" Bellefontaine	8 00
18	C. L. Williamson	Blacksmith work for McConnell	3 60
19	John Bushnell	" "	1 60
20	John Reedy	" "	8 87
21	Chas. H. Cook	" Brennan	3 50
22	Makley & Ryder	" "	1 60
23	Adam Gruver	" "	1 05
24	James Burt	Making lock gates and other exp's	77 50
25	Chas. H. Cook	Blacksmith work for Brennan	6 15
26	Geo. W. McCabe	Stone for Turtle creek culvert	118 30
27	Jas. H. McCabe	Use of steam engine at "	133 97
28	Alex. Fisher	Use of derrick at Turtle creek culv	91 00
29	S. Zollinger & Co.	Cement for Turtle creek culvert	99 40
30	H. P. Bailey	Lumb. for splic. 1 g. & for T. C. cul	129 63
31	Wm. A. Snypp	Sand for Turtle creek culvert	9 90
32	Edward J. Crowley	Boating stone from Piqua to culv.	48 00
33	John O'Connor	Expenses as superintendent	68 70
34	Geo. J. Roberts	Supplies for dredge No. 4	3 50
35	H. C. Reed	Coal "	10 15
36	C. O Hardesty	" "	45 00
37	Thos. McDermott	Supplies "	5 55
38	Chas. E. Perkins	Expenses as chief engineer	12 00
39	John Gretzinger	Labor and supplies	180 11
	Pay roll, officers	Salaries	443 33
	" No. 1	Labor	315 50
	" No. 2	"	416 00
	" No. 3	"	298 00
	" No. 4	"	639 00
	" No. 5	"	751 00
	" No. 6	"	372 75
	Total for month		$4,464 60

ABSTRACT OF MONEY PAID—Continued.

No. of voucher.	To whom.	And for what paid.	Amount.
	November, 1897.		
1	Logan C. Miller	Expenses for col. office, Dayton	$7 80
2	Hugh Brennan	Feed. team and other exp. at Dayt.	33 25
3	Ed. McConnell	" " Piqua	36 50
4	James L. Day	Spikes for Lewistown reserv'r bank	9 99
5	T. F. Carroll	" and tools " "	9 25
6	Tischer & Reisinger	" " " "	35 21
7	F. L. Vangorder	" " " "	2 00
8	Cover & Shank	Blacksmith wk. " "	2 55
9	C. F. Richcreek	" " "	6 80
10	The Dayton Electric Light Co.	Elec. lgt. fix. for col. office, Dayton	4 50
11	G. W. & E. E. Buvinger	Expenses for Brennan's boat, Dayt.	2 50
12	Makley & Ryder	Horseshoeing " team, "	3 00
13	Walter Shaw	Liniment " " "	75
14	Dayton Supply Co	Supplies " " "	1 31
15	Alexander Gebhart	Lumber for running plank	6 14
16	A. C. House	" Lewistown reserv. bank	1,374 08
17	"	" "	89 34
18	James Burt	Making lock gates and other exp.	76 00
19	Brandriff & Hedges	Supplies for dredge No. 4	1 50
20	Chas. A. Gump	" "	8 39
21	E. Bimm & Son	" "	3 30
22	Boudle Bros	" "	6 10
23	J. D. Whitmore	Coal	18 00
24	Thos. W. McDermott	Supplies	2 05
25	Henry Tecklenburg	Livery and horse feed, Loramie	8 50
26	James Dudgeon	" " Lakeview	6 50
27	H. H. Bogart	" " "	1 00
28	Geo. P. Baker	Cement for bulkhead at Lewist. res.	7 50
29	The Wantz Lumber Co	Lumber for Miami and Sunfish aq.	157 97
30	Chas. Glawe Mfg. Co	Canvas dam	55 00
31	John O'Connor	Expenses as superintendent	67 10
32	Chas. E. Perkins	" chief engineer	9 00
33	Samuel Bachtell	" assistant engineer	6 00
34	John Gretzinger	Labor and materials	44 64
	Pay roll, officers	Salaries	443 33
	" No. 1	Labor	227 00
	" No. 2	"	256 25
	" No. 3	"	225 10
	" No. 4	"	802 08
	" No. 5	"	36 75
	Total for month		$4,089 03
	December, 1897.		
1	Logan C. Miller	Expenses as collector at Dayton	5 00
2	Lewis G. Davis	" " Piqua	2 25
3	Hugh Brennan	Keeping team and other expenses	23 70
4	Ed. McConnell	" "	35 70
5	Boudle Bros	Supplies and mach. w'k, dredge 4	7 09
6	Brandriff & Hedges	Supplies for dredge	3 05

ABSTRACT OF MONEY PAID—Continued.

No. of voucher.	To whom.	And for what paid.	Amount.
	December, 1897—Concluded.		
7	C. E. Fergus	Saw filing	$1 20
8	John Benkert	Harness repairs	35
9	John Bushnell	Blacksmith work	5 50
10	C. L. Wood	Lumber for Lockport aqueduct	6 50
11	Greaff Bros	Livery at Piqua	4 50
12	James A. Wilson	Earth tak. to make fill at Turtle Cr'k	42 00
13	John O'Connor	Expenses as superintendent	66 00
14	Samuel Bachtell	Traveling expenses as asst. engineer	7 50
15	Chas. E. Perkins	" " chief "	11 50
	Pay roll, officers	Salaries	479 33
	" No. 1	Labor	90 50
	" No. 2	"	146 75
	" No. 3	"	50 00
	" No. 4	"	599 92
	Total for month		$1,587 64
	January, 1898.		
1	Logan C. Miller	Expenses as collector at Dayton	1 00
2	Hugh Brennan	Keeping team and other expenses	24 40
3	Ed. McConnell	" "	22 50
4	Makley & Ryder	Horseshoeing	3 00
5	John Reedy	Blacksmith work	3 10
6	John Bushnell	Horseshoeing	2 40
7	Harter & Cosley	Spikes for Brennan	4 00
8	Lawrence Sanders	Scythe	65
9	W. H Francis	Lumber for dam at Troy feeder	24 93
10	John Gretzinger	Rebuilding steam pump	96 38
11	John O'Connor	Expenses as superintendent	66 55
12	Samuel Bachtell	" assistant engineer	10 00
13	Chas. E. Perkins	" chief "	12 00
	Pay roll, officers	Salaries	443 33
	" No. 1	Labor	186 75
	" No. 2	"	152 25
	" No. 3	"	50 00
	Total for month		$1,103 24
	February, 1898.		
1	Logan C. Miller	Expenses as collector at Dayton	1 30
2	Ed. McConnell	Keeping team	20 00
3	Hugh Brennan	" and other expenses	25 50
4	Leonhard & Son	Harness sup. for Brennan's team	2 20
5	Tischer & Reisinger	Supplies " boat	15 45
6	Pearl Mercer	Freight on irons and derrick	5 00
7	Makley & Ryder	Horseshoeing for Brennan	3 55
8	C. Henne & Son	Rubber boots "	8 50
9	Samuel Raper	Livery for collector at Dayton	3 00
10	Jesse Short	" at Huntsville	11 50
11	"	" "	6 50

ABSTRACT OF MONEY PAID—Continued.

No. of voucher.	To whom.	And for what paid.	Amount.
	February, 1898—Concluded.		
12	John O'Connor	Expenses as superintendent	$66 90
13	W. T. Grafton	Livery at Troy	13 50
14	Scobey & Vandeveer	" "	1 50
15	The Tipp Mfg. Co	Lumber	15 56
16	John Bushnell	Blacksmith work for McConnell	2 00
17	Samuel Bachtell	Traveling expenses as asst. engineer	5 00
18	C. E. Perkins	" " chief "	9 00
	Pay roll, officers	Salaries	443 83
	" No. 1	Labor	248 50
	" No. 2	"	150 50
	" No. 3	"	50 00
	" No. 4	"	99 50
	Total for month		$1,207 79
	March, 1898.		
1	Logan C. Miller	Expenses as collector	6 70
2	Hugh Brennan	Feeding team and other expensee	24 30
3	Ed. McConnell	" "	24 49
4	W. E. Emrick	Wheelbarrows	6 90
5	Tischer & Reisinger	Supplies for Brennan's boat	17 56
6	Clem. L. Kimmel	Plough " "	9 15
7	Chas. H. Cook	Blacksmith work for Brennan	5 95
8	Makley & Ryder	Horseshoeing "	8 40
9	Jas. W. Graham	Saw filing "	1 25
10	Samuel Raper	Livery for superintendent	5 00
11	Alex. Gebhart	Lumber for Brennan	48 08
12	John O'Connor	Expenses as superintendent	68 45
13	Chas. E. Perkins	" chief engineer	8 50
14	Samuel Bachtell	" assistant engineer	8 60
	Pay roll, officers	Salaries	479 83
	" No. 1	Labor	217 75
	" No. 2	"	210 86
	" No. 3	"	50 00
	" No. 4	"	101 25
	Total for month		$1,297 52
	April, 1898.		
1	Logan C. Miller	Expenses as collector at Dayton	1 75
2	C. L. Wood	Lumber	9 12
3	L. N. Kirschner	"	8 90
4	Houck & Ely	"	12 00
5	Alex. Gebhart	"	29 49
6	W. H. Francis & Co	"	8 86
7	Greaff Bros	Livery	12 00
8	Samuel Raper	"	12 00
9	W. H. Angle	Hardware	37 22
10	James Burt	Expenses as carpenter	5 10
11	D. Leonhard & Son	Harness supplies	3 85

ABSTRACT OF MONEY PAID—Continued.

No. of voucher.	To whom.	And for what paid.	Amount.
	April, 1898—Concluded.		
12	Harter & Cosley	Hardware	$4 00
13	Fred C. Greendish	Earth for making fill	12 50
14	Hugh Brennan	Feeding team and other expenses	34 75
15	Ed. McConnell	" "	31 00
16	Klein, Cohn & Hurtig	Sacks	8 75
17	Makley & Ryder	Horseshoeing	3 00
18	Tischer & Reisinger	Hardware	20 99
19	C. H. Cook	Blacksmith work	59 05
20	Chas. A. Hetz'er	Supplies for McConnell's boat	2 03
21	Chas. A. Gump	Rubber boots	11 25
22	Watson Bros	"	12 00
23	J. D. Whitmore	Coal for dredge 4	32 45
24	V. Patterson	Supplies for dredge 4	2 00
25	Irvin Paint & Glass Co	"	7 80
26	G. W. & E. E. Buvinger	"	5 75
27	J. W. Galloway	Repairs for dredge 4	40 20
28	Dayton Globe Iron Works Co	Supplies for dredge 4	59 20
29	S. T. & G. A. Gebhart	"	3 45
30	Chas. A. Gump	"	6 15
31	John O'Connor	Expenses as superintendent	67 45
32	E. H. Fauver	Stone for Holtz creek culvert	153 00
33	John Gitzinger	Labor and mat. for Holtz ck. culv.	486 75
34	John Gretzinger	Labor and materials	5 40
35	C. E. Perkins	Traveling expenses as chief eng'r	6 25
	Pay roll, officers	Salaries	443 33
	" No. 1	Labor	513 50
	" No. 2	"	329 00
	" No. 3	"	111 00
	" No. 4	"	314 25
	" No. 5	"	598 50
	" No. 6	"	599 25
	" No. 7	"	235 00
	" No. 8	"	224 50
	" No. 9	"	108 87
	" No. 10	"	144 75
	" No. 11	"	163 50
	Total for month		$5,000 91
	May, 1898.		
1	Logan C. Miller	Expenses as collector at Dayton	10 00
2	Hugh Brennan	Keeping team and other expenses	24 60
3	J. W. Woodford	Expenses for dredge No. 1	4 73
4	F. B. Long	Coal "	22 50
5	W. M. Whitmore	Coal & cem., dredge 4 & Miami aq.	9 56
6	Chas. Adams	Postage on reports	1 74
7	The Patterson Tool Co	Tools for Brennan	3 30
8	W. E. Orr	Rubber boots	19 25
9	Covender & Buchanan	Bolts	50
10	M. K. Coongton	Livery at Huntsville	5 00
11	J. H. Dudgeon	" and other exp. at Lake View	5 75

ABSTRACT OF MONEY PAID—Continued.

No. of voucher.	To whom.	And for what paid.	Amount.
	May, 1898—Concluded.		
12	Eli Norviel	Lumber for Lewistown reserv. bank	$22 01
13	Houck & Ely	" Miami aqueduct	213 32
14	Anton Brucken	" Loramie "	251 98
15	Makley & Ryder	Horseshoeing for Brennan	2 30
16	John O'Connor	Expenses as superintendent	67 90
17	Sam'l Raper	Livery at Dayton	15 00
18	Greaff Bros	" Piqua	11 00
19	J. D. Inderiden & Co	Spikes, etc., for Loramie aqueduct	13 70
20	Henry Tecklenberg	Horse feed	2 25
21	John Wilkins	Blacksmith work at Loramie aque.	4 85
22	August Wise	Lumber for Loramie reserv. dams	35 98
23	Loramie Milling Co	Sacks for waste gates	2 40
24	Thos. McDermott	Expenses for dredge 4	70
25	J. D. Whitmore	Coal "	19 50
26	Buckeye Brass Works Co	Supplies "	1 05
27	The Irvin Paint Co	" "	2 65
28	Ed. McConnell	Keeping team and other expenses	31 89
29	Chas. H. Cook	Rep. and furn'g rods for Miami aq.	176 20
30	Lewis G. Davis	Expenses as collector at Piqua	3 00
31	Tischer & Reisinger	Supplies for Brennan	5 05
32	Samuel Bachtell	Traveling expenses as ass't eng'r	4 00
33	John Gretzinger	Labor and material furnished	197 52
34	C. E. Perkins	Expenses as chief engineer	15 00
	Pay roll, officers	Salaries	443 33
	" No. 1	Labor	623 37
	" No. 2	"	414 88
	" No. 3	"	176 25
	" No. 4	"	205 19
	" No. 5	"	739 75
	" No 6	"	90 00
	" No. 7	"	599 24
	" No. 8	"	609 50
	" No. 9	"	360 67
	" No. 10	"	93 00
	Total for month		$5,561 81
	June, 1898.		
1	Logan C. Miller	Expenses as collector	4 80
2	The Watson Bros	Rubber boots by collector	2 50
3	Ed. McConnell	Keeping team and other expenses	24 83
4	Hugh Brennan	" "	37 05
5	F. B. Long	Coal for dredge 1	30 00
6	August Wise	Towing boat of coal for dredge 1	5 00
7	Tischer & Reisinger	Hardware for Brennan's boat	25 62
8	Chas. H. Cook	Repairing rods for Miami aqueduct	11 25
9	D. C. Statler	Stone for Newburn culvert	18 50
10	James Rice	Lumber for rack at Port Jefferson	3 80
11	Central Union Telephone Co	Rent of telephone	10 09
12	Edward Glasser	Stone for Crook's culvert	4 55
13	H. C. Reed & Co	Coal for dredge 4	10 15

ABSTRACT OF MONEY PAID—Continued.

No. of voucher.	To whom.	And for what paid.	Amount.
	June, 1898—Concluded.		
14	Brandriff & Hedges	Paint for McConnell's boat	$12 56
15	S. Zollinger	Cement and other material	21 40
16	E. J. Eby	Cement and coal at feeder gates	103 58
17	John Bushnell	Horseshoeing for McConnell	3 05
18	John Benkert	Harness supplies for " boat	8 65
19	George H. Worch	Lumber for running plank	11 22
20	C. L. Wood	" dam at Piqua	87 04
21	G. W. McCabe	Stone for abut. feeder gates, Troy	98 90
22	Alexander Gebhart	Lumber for Miami aqueduct	99 32
23	"	" "	22 26
24	W. H. Francis	" feeder gates at Troy	8 86
25	Houck & Ely	" Miami aque. & Troy fd.	386 07
26	W. T. Grafton	Team hauling men	18 00
27	"	Livery at Troy for five months	32 50
28	T. F. Shaw	" Sidney	6 00
29	Davis & Reed	" Piqua	11 75
30	Samuel Raper	" Dayton	12 00
31	Greaff Bros.	" Piqua	9 50
32	W. H. Angle	Spikes for McConnell	10 84
33	O. J. Taylor	" "	13 40
34	Makley & Ryder	Horseshoeing for McConnell	3 75
35	John O'Connor	Expenses as superintendent	68 60
36	Chas. E. Perkins	" chief engineer	10 25
37	S. Bachtell	" ass't "	4 00
38	John Gretzinger	Material and labor	94 53
	Pay roll, officers	Salaries	454 33
	" No. 1	Labor	404 75
	" No. 2	"	458 75
	" No. 3	"	187 50
	" No. 4	"	147 72
	" No. 5	"	443 98
	" No. 6	"	392 37
	" No. 7	"	387 75
	" No. 8	"	355 50
	Total for month		$4,578 82
	July, 1898.		
1	Logan C. Miller	Expenses as collector at Dayton	4 00
2	Hugh Brennan	Feeding team and other expenses	28 70
3	Ed. McConnell	" "	20 75
4	Houck & Ely	Lumber for Mad river dam	96 90
5	H. P. Bailey	" lock gates at Locking'n	56 99
6	"	" " "	11 30
7	L. N. Kershner	" waste gates at Piqua	47 05
8	M. F. Apple	" Carrollton lock	7 48
9	Wm. M. Hahn	" Port Jefferson dam	238 56
10	Tischer & Reisinger	Spikes and supplies for Brennan	29 59
11	W. H. Angle	" McConnell	20 40
12	The Irvin Paint Co.	Supplies for dredge No. 4	5 00
13	E. H. Fauver	Stone for Mad river dam and abut.	82 00

ABSTRACT OF MONEY PAID—Continued.

No. of voucher.	To whom.	And for what paid.	Amount.
	July, 1898—Concluded.		
14	James Burt	Making lock gates	$75 00
15	Bauman Bakery Co.	Sacks for Mad river dam	32 50
16	John Kirchner	Explosives for Mad river dam	3 65
17	The Dayton Gas and Fuel Co.	Gas for collector's office, Dayton	43 75
18	John Bushnell	Horseshoeing for McConnell	2 40
19	The Brownell Co.	Repair scoop for Brennan	1 00
20	Chas. H. Cook	Blacksmithing, mach. wk. & supp's	21 25
21	Thos. McDermott	Supplies for dredge No. 4	7 75
22	J. D. Whitmore	Coal "	17 23
23	John O'Connor	Expenses as superintendent	65 80
24	G. W. Weaver	Supplies for dredge No. 4	9 72
25	W. H. Whitmore	Coal "	13 65
26	Alex. Gebhart	Lumber for Mad river dam	47 73
27	E. E. Sears	Drive well at lock house, Snyd's mill	11 50
28	W. M. Whitmore	Cement for Mad river dam	35 95
29	Kramer & Haverbeck	Coal for dredge No. 1	10 79
30	The New Bremen Machine Co.	Repairs "	49 25
31	Kramer & Haverbeck	Coal "	5 06
32	John M. O'Connor	Livery at Dayton	11 25
33	Chas. E. Perkins	Expenses as chief engineer	9 00
34	Samuel Bachtell	" ass't "	4 00
	Pay roll, officers	Salaries	401 66
	" No. 1	Labor	542 00
	" No. 2	"	472 25
	" No. 3	"	294 50
	" No. 4	"	729 68
	" No. 5	"	197 11
	" No. 6	"	541 50
	" No. 7	"	250 37
	Total for month		$4,551 02
	August, 1898.		
1	Logan C. Miller	Expenses as collector at Dayton	7 15
2	Ed. McConnell	Keeping team and other expenses	22 15
3	Hugh Brennan	" "	25 40
4	Houck & Ely	Lumber for Mad river lock	17 74
5	Alex. Gebhart	" " aqueduct	40 85
6	The Tipp. Bldg. and Mfg. Co.	" dams at Troy feeder	7 38
7	H. P. Bailey	" lock gates at 3 locks	26 68
8	E. Bimm & Son	Tow line for dredge No. 4	5 15
9	J. D. Whitmore	Coal "	25 85
10	Roney & Shearer	Tools "	6 75
11	The Irvin Paint Co.	Oil "	2 50
12	Thos. McDermott	Expenses "	8 30
13	Tischer & Reisinger	Tools and spikes for repair boat 1	6 85
14	Chas. H. Cook	Repairs on aqueduct rods	90
15	W. M. Whitmore	Cement for Mad river lock	2 70
16	Makley & Ryder	Horseshoeing for Brennan	3 00
17	James Burt	Lock gates for lower locks at 3 locks	75 00
18	Davis & Reed	Livery at Piqua	11 75

ABSTRACT OF MONEY PAID—Continued.

No. of voucher.	To whom.	And for what paid.	Amount.
	August, 1898—Concluded.		
19	John O'Connor	Expenses as superintendent	$66 50
20	Lowe Bros. Co	Window glass for repair boat No. 1.	78
21	Dayton Globe Iron Works Co	Castings for dredge No. 4	10 16
22	Jesse Short	Livery at Huntsville for 6 months	12 00
23	Wm. C. Wyman	Cutting weeds on canal bank, Sidney	3 00
24	Henry Cowan	Trimming trees " "	2 00
25	John O'Connor	Livery at Dayton	9 25
26	Samuel Bachtell	Traveling expenses as ass't engineer	9 50
27	C. E. Perkins	" " chief engineer	9 25
	Pay roll, officers	Salaries	401 66
	" No. 1	Labor	436 25
	" No. 2	"	503 50
	" No. 3	"	295 50
	Total for month		$2,050 45
	September, 1898.		
1	Logan C. Miller	Expenses as collector at Dayton	7 40
2	C. B. Jamison	" " Piqua	1 00
3	Ed. McConnell	Keeping team and other expenses	21 26
4	Hugh Brennan	" " "	31 20
5	Thos. McDermott	Expenses for dredge No. 4	3 75
6	Chas. A. Gump	Material "	3 57
7	Houck & Ely	Lumber "	2 90
8	Dayton Globe Iron Works Co	Castings "	28 65
9	C. L. F. Williamson	Repairing gate and other irons	3 85
10	John Bushnell	Horseshoeing for McConnell	1 10
11	George Herr	Blacksmith work "	4 40
12	J. D. Inderiden	Material "	3 75
13	S. Zollinger & Co	Cement for Loramie flood gates	6 30
14	D. Leonhard & Son	Harness repairs for Brennan	1 65
15	W. C. Kershner	Wall paper for Mad R. lock house	17 44
16	John O'Connor	Expenses as superintendent	67 60
17	Dayton Livery Co	Livery at Dayton	1 50
18	Davis & Reed	" Piqua	10 00
19	P. H. Tracy	Team & wagon hauling men to work	11 75
20	John M. O'Connor	Livery at Dayton	7 50
21	Chas E. Perkins	Expenses as chief engineer	10 00
	Pay roll, officers	Salaries	437 66
	" No. 1	Labor	155 25
	" No. 2	"	347 00
	" No 3	"	278 50
	" No. 4	"	153 50
	" No. 5	"	177 00
	Total for month		$1,795 48

ABSTRACT OF MONEY PAID

By H. W. Meacham, Superintendent Division No. 3, Subdivision No. 3, Miami and Erie Canal, for Material and Labor for the Maintenance and Repair of the Public Works.

No. of voucher.	To whom.	And for what paid.	Amount.
	June, 1897.		
1	Geo. F. Almy	Tool house and office	$20 00
2	F. H. Stallkamp	Rope	81
3	Samuel Charter	Cut. weeds on State prop., Maumee.	15 00
4	Beehmer & Floding	Papering office room at Delphos	1 62
5	R. R. Bortel	Pike pole and axe handles	1 90
6	C. Geiger & Son	Rep'g desk for collec. office, Defiance	6 00
7	J. W. Woodward	Lettering dredge and drayage	6 55
8	M. A. Bell	Doctoring horse	3 00
9	L. W. Milley	Work with team	15 00
10	Shier Brothers	Plastering lock house at Miami	9 50
11	Aaron Fisher	Crush. stone for Jenning's creek aque	10 35
12	Gosiine & Barber	Coal for dredge No. 1	34 08
13	The Henry Phillips Co	Mowing machine	45 00
14	The M. I. Wilcox Co	Rope, lard oil, etc	10 60
15	Baker Brothers	Repairs to dredge No. 1	17 09
16	The Defiance Machine Works	Casting wickets	34 20
17	The Vulcan Iron Works	Repairs to dredge No. 1	45 97
18	D. H. Hancock	Expenses as collecter and office rent	20 53
19	W. H. Doll	" "	7 25
20	H. W. Myers	" "	2 74
21	Wesley McDonald	Exp. at Celina look. after oil wells	3 50
22	S. E. Allman	Keeping team, etc	21 25
23	J. R. Spencer	"	20 00
24	Wm. Casteel	"	20 00
25	P. McGovern	Livery	14 00
26	Chas. Van Hyning	"	7 75
27	Jos. Hixon	"	5 00
28	E. Young	"	5 00
29	Hitz & Livers	Blacksmith work	1 75
30	J. M. Trumbull	" "	40
31	G. W. Nulton	" "	40
32	John Scherger	" "	4 75
33	C. S. Smith	" "	2 35
34	G. E. Nungester	Hardware	97
35	W. A. Kehnast	"	35 20
36	Delphos Hardware Co	"	16 04
37	" "	"	37 80
38	H. E. Kuhlman & Co	"	35 27
39	" "	"	32 09
40	W. J. Wolford	"	20 32
41	The Bostwick-Braun Co	"	4 90
42	Albert J. Manges	"	2 50
43	J. H. Cline	Lumber	15 72
44	Wm. Peters	"	2 77
45	Wm. T. Hubbard	"	3 74
46	M. J. Hosler	"	64 51
47	"	"	189 12
48	W. A. Reynolds	"	197 09
49	J. B. Mersman	"	232 69

ABSTRACT OF MONEY PAID—Continued.

No. of voucher.	To whom.	And for what paid.	Amount.
	June, 1897—Concluded.		
50	H W. Meacham	Expenses as superintendent	$62 30
51	Samuel Bachtell	" assistant engineer	10 30
52	Chas. E. Perkins	" chief "	11 50
	Pay roll, officers	Salaries	604 48
	" No. 1	Labor	616 53
	" No. 2	"	628 92
	Total for month		$3,241 10
	July, 1897		
1	The Vulcan Iron Works Co	Chain and repairs for dredge No. 1	25 80
2	The Defiance Machine Works	Repairs for dredge No. 1	10 75
3	E. D. Hall	Wood " "	10 00
4	Stillman Rose	1 cord wood " "	1 25
5	E. N. Lewis	Paper, etc. for rep. to lock h'se Defi'ce	11 99
6	A. R Gleason	Labor with team	30 00
7	W. H. Doll	Expenses as collector and office rent	6 70
8	H. W. Myers	" " "	4 34
9	P. McGovern	Livery and teaming	13 00
10	Lewis Overly	"	2 00
11	F. J. McFarland	"	4 50
12	S. E Allmon	Keeping team, etc	20 54
13	J. R. Spencer	" "	22 25
14	Wm. Casteel	"	20 00
15	Hi z & Livers	Blacksmith work	1 35
16	W. P. De Hart	"	2 55
17	Wallace Dickman	"	4 40
18	Geo. Bambargle	"	70
19	Geo. J. Rexroth	"	1 80
20	"	"	4 80
21	R. B. Heller	Hardware	5 68
22	J. Anglemyer	"	63
23	Delphos Hardware Co	"	2 30
24	W. A. Kehnast	"	5 00
25	Wolford & Corlett	"	23 20
26	E D Hall	Lumber	27 72
27	Thieson & Hildred	"	47 67
28	M. J. Hosler	"	97 23
29	W. A. Reynolds	"	147 69
30	J. B. Merseman	"	561 24
31	H. W. Meacham	Expenses as superintendent	65 30
32	Samuel Bachtell	Traveling expenses as asst. engineer	16 00
33	C. E. Perkins	" " chief "	12 00
	Pay roll, officers	Salaries	609 48
	" No. 1	Labor	557 77
	" No. 2	"	385 00
	" No. 3	"	366 27
	Total for month		$3,128 30

ABSTRACT OF MONEY PAID—Continued.

No. of voucher.	To whom.	And for what paid.	Amount.
	August, 1897.		
1	L. A. Eckert	Telephone messages	$2 80
2	T. B. Edwards	Brooms and bucket	85
3	Toledo Work House	Brick	6 00
4	Geo. Capper	Cutting weeds with team & mower	15 00
5	John Jobenville	Clearing locks at Defiance	5 60
6	Jack Fry	Removing vault	1 50
7	H. J. Smith	Calking State boat and material	15 87
8	A. Tennison	" "	30 25
9	Samuel Charter	Labor on canal	22 00
10	J. W. Woodward	Deck brooms and express	1 30
11	Stillman Rose	Hauling manure	2 00
12	Ira Leach	Hauling wickets to blacksmith shop	75
13	Chas. Wittich	Expenses as collector	13 50
14	H. W. Myers	" "	3 66
15	H. E. Fischer	" " and office rent	30 60
16	W. H. Doll	" " "	7 25
17	S. E. Allmon	Keeping team, etc.	20 95
18	J. R. Spencer	" "	20 75
19	Wm. Casteel	" "	21 50
20	Kundert Bros	Livery	5 50
21	P. McGovern	"	12 50
22	Alexander Bros	"	1 50
23	C. L. Boulton	"	3 50
24	C. J. Miller	Wood for dredge No. 1	6 15
25	Christ Dehl Brewing Co.	Coal " "	4 46
26	Jos. Hurley	" " "	16 48
27	Wm. Samse	" " "	5 04
28	Wm. Dennis	" " "	3 11
29	Stuter & Yacklin	Crushed st'e for Jennings Cr'k aque.	55 60
30	Lewis Overly	Rip rap stone	1 87
31	Herman Ricker	Cement	13 58
32	The Kind-Kuhlman Co.	"	11 27
33	Wallace Dickman	Blacksmith work	2 45
34	C. S Smith	"	4 15
35	W. P. De Hart	"	5 40
36	Hitz & Livers	"	2 20
37	W. A. Kehnast	Hardware	9 65
38	H. E. Kuhlman & Co	"	3 65
39	Myers Hardware Co	"	5 32
40	W. A. Reynolds	Lumber	180 83
41	J. H. Cline	"	93 54
42	John C. Shaffer	"	62 75
43	M. J. Hosler	"	24 75
44	Karst & Tenzer	"	2 45
45	Wm. Peters	"	82 57
46	First National Bank, Defiance	Timber	6 25
47	H. W. Meacham	Expenses as superintendent	65 95
48	Standard Oil Co	Gasoline for boat "Columbia"	8 16
49	" "	" " "	4 50
50	C. L. McIntire	" " "	2 58
51	King Bros	" " "	10 35
52	The National Supply Co	Repairs " "	2 33

ABSTRACT OF MONEY PAID—Continued.

No. of voucher.	To whom.	And for what paid.	Amount.
	August 1897—Concluded.		
53	Oil Well Supply Co	Repairs for boat "Columbia"	$5 42
54	Samuel Bachtell	Traveling expenses as ass't eng'r	9 00
55	Chas E Perkins	" chief "	16 75
56	C. C. Richardson	Use of boat for inspection trip	200 00
	Pay roll, officers	Salaries	609 48
	" No. 1	Labor	546 87
	" No. 2	"	504 08
	" No. 3	"	365 25
	Total for month		$3,199 37
	September, 1897.		
1	The Kind-Kuhlman Co	Sand and cement	27 04
2	R. R. Bortel	Axe handles and labor	2 30
3	Samuel Borck	Repairing lock house	2 25
4	John Allen	Labor on culvert at Maumee	6 00
5	Samuel Charter	" " etc	10 50
6	W. H. Doll	White lead and oil	2 35
7	"	Lard oil for dredge No. 1	3 50
8	F. B. Long	Wood and coal "	37 07
9	The Auglaize Machine Co	Repairs "	5 45
10	J W. Woodward	Lye, coal, etc., "	1 05
11	Wesley McDonald	Expenses to Celina in Aug. & Sept	4 75
12	Geo. Nulton	Blacksmith work	85
13	W. H. Doll	Expenses as collector & office rent	7 00
14	D. H. Hancock	" "	16 83
15	H. W. Myers	" "	3 59
16	S. E. Allmon	Keeping team, etc	24 10
17	J. R. Spencer	"	21 65
18	Wm. Casteel	"	20 00
19	Wm. Jones	Livery	21 00
20	P. McGovern	" and teaming	11 50
21	Dunan & Koeper	Hardware	23 01
22	Delphos Hardware Co	"	70
23	F. Garmhausen	Lumber	4 43
24	J. H. Cline	"	4 15
25	Wm. Meckenbach	"	10 83
26	Theisen & Hildred	"	115 24
27	Jos. Barrington	"	91 09
28	F. A. Chapin	"	137 92
29	H. W. Meacham	Expenses as sup't of repairs	64 65
30	C. E. Perkins	" chief engineer	12 50
	Pay roll, officers	Salaries	611 48
	" No. 1	Labor	319 67
	" No. 2	"	494 50
	" No. 3	"	511 65
	Total for month		$2,630 10

ABSTRACT OF MONEY PAID—Continued.

No. of voucher.	To whom.	And for what paid.	Amount.
	October, 1897.		
1	The M. I. Wilcox Co	Manila rope and paint	$9 81
2	The Kind-Kuhlman Co	Sand for lock No. 2	1 27
3	The St. Mary's Machine Co	Castings	18 57
4	The Inc'd Village of St. Mary's	Sand used at aqueduct	5 00
5	J. J. Kablo	Repairs for mowing machine	2 50
6	F. B. Long	Coal for dredge No. 1	4 00
7	Chas. Marshall	Labor on banks of Grand reservoir	12 00
8	Chas. Charter	Labor on canal	6 00
9	Geo. Bone	Attending waist weir at Grand res.	25 00
10	Jos. Reynolds	Labor & at'g l'k inside cut, G. Rap.	15 00
11	W. H. Doll	Expenses as collector & office rent	7 00
12	H. W. Myers	" etc.	9 06
13	S. E. Allmon	Keeping team, etc	21 15
14	J. R. Spencer	"	20 00
15	Wm. Casteel	" etc	21 00
16	L. R. Piper	Livery	31 75
17	Enos Young	"	9 00
18	Hitz & Livers	Blacksmith work	13 10
19	C. S. Smith	"	10 60
20	Dunan & Koeper	Hardware	2 58
21	"	"	29 60
22	H. E. Kuhlman	"	36 55
23	W. J. Wolford	"	78
24	Jos. Barrington	Lumber	24 24
25	W. A. Reynolds	"	63 20
26	Wm. T. Hubbard	"	19 70
27	Karst & Lenzer	"	95 90
28	E. D. Hall	"	105 02
29	H. W. Meacham	Expenses as superintendent	64 85
30	Samuel Bachtell	" ass't eng'r	8 00
31	Chas. E. Perkins	" chief "	6 75
	Pay roll, officers	Salaries	611 48
	" No. 1	Labor	308 67
	" No. 2	"	581 85
	Total for month		$2,200 98
	November, 1897.		
1	W. H. Doll	Expenses as collector & office rent	9 80
2	H. W. Myers	"	4 69
3	Wesley McDonald	" to Celina	3 30
4	The Defiance Machine Works	Repairs to dredge No. 1	10 75
5	Lawrence Burkhardt	Coal & wood for col. office at Toledo	9 00
6	Leiter & Webster Bros	Paper for State's house at Toledo	5 58
7	Chas. Mondary	Hauling lumber	5 20
8	G H Kenker	Plastering State's house, etc., Toledo	15 00
9	Wm. F. Smith	Labor an canal	15 00
10	H. M. Dimmer	Papering lock house at Toledo	7 10
11	Chas. Charter	Labor on canal	15 00
12	S. E. Allmon	Keeping team, etc	21 60
13	J. R. Spencer	"	28 10

ABSTRACT OF MONEY PAID—Continued.

No. of voucher.	To whom.	And for what paid.	Amount.
	November, 1897—Concluded.		
14	Wm. Casteel	Keeping team, etc	$20 00
15	Albert Smith	Blacksmith work	9 85
16	Chas. Van Hyning	Livery	5 00
17	P. McGovern	" and hauling	15 00
18	Hollingsworth & Bamberger	Lumber	8 12
19	J. H. Cline	"	2 59
20	"	"	51 74
21	Herman Ricker	"	18 50
22	Dan W. McCoy	"	39 25
23	J. B. Merseman	"	70 62
24	Theison & Hildred	"	81 97
25	H. W. Meacham	Expenses as superintendent	63 40
26	Waterville Milling Co	Labor on break	6 50
27	Chas. E. Perkins	Expenses as chief engineer	7 50
	Pay roll, officers	Salaries	611 48
	" No. 1	Labor	569 25
	Total for month		$1,730 89
	December, 1897.		
1	L. A. Eckert	Telephone messages, etc	5 38
2	Aaron Fisher	Crushed stone	10 42
3	F. H. Stallkamp & Co	Manila rope	2 53
4	Enos Young	Hauling lumber, etc	17 00
5	Jos. Hitz	Blacksmith work	50
6	W. H. Doll	Expenses as collector and office rent	6 00
7	D. H. Hancock	" "	18 86
8	H. W. Myers	" etc	4 50
9	S. E. Allmon	Keeping team, etc	20 85
10	J. R. Spencer	"	21 00
11	Wm. Casteel	"	20 00
12	Sloan & Jamison	Livery	9 50
13	C. L. Carpenter	"	3 00
14	H. E. Kuhlman	Hardware	5 34
15	Edwards & Grant	"	3 74
16	Myers Hardware Co	Lumber	5 76
17	Wheeler Bros	"	11 00
18	H. W. Meacham	Expenses as superintendent of rep's	62 75
19	Samuel Bachtell	" ass't engineer	8 00
20	Chas. E. Perkins	" chief "	9 50
	Pay roll, officers	Salaries	603 48
	" No. 1	Labor	196 25
	" No. 2	"	192 90
	Total for month		$1,238 26
	January, 1898.		
1	W. E Kerr	One pair rubber boots	2 75
2	Andrew Baker	Gravel	60
3	W. H. Doll	Oil and paint	5 30

ABSTRACT OF MONEY PAID—Continued.

No. of voucher.	To whom.	And for what paid.	Amount.
	January, 1898—Concluded.		
4	Lawrence Burkhart	Wood for collector's office	$4 00
5	Dora McCulloch	Labor and mat. for dredge boat 1	30 00
6	J. W. Woodward	One ship auger	1 20
7	P. McGovern	Livery	11 00
8	W. H. Doll	Rent for collector's office	5 00
9	H. W. Myers	Expenses as collector	4 54
10	S. E. Allmon	Keeping team, etc	23 40
11	J. R. Spencer	"	22 70
12	Wm. Casteel	"	20 00
13	Duncan & Koeper	Hardware	75
14	C. Buehler	"	2 10
15	W. K. Evans	"	2 40
16	W. A. Kehuast	"	8 70
17	Delphos Hardware Co	"	108 46
18	Karst & Tenzer	Lumber	10 51
19	Flo Garmhauser	"	19 28
20	R. A. Housley	"	20 23
21	Jos. Barrington	"	35 39
22	J. B. Mersman	"	52 44
23	H. W. Meacham	Expenses as superintendent of rep's	64 65
24	Samuel Bachtell	Traveling exp. as ass't engineer	7 00
25	Chas. E. Perkins	" chief "	10 00
	Pay roll, officers	Salaries	603 48
	" No. 1	Labor	195 30
	" No. 2	"	145 87
	" No. 3	"	121 87
	Total for month		$1,533 92
	February, 1898.		
1	W. H. Doll	Expenses as collector and office rent	6 00
2	H. W. Myers	"	5 92
3	Samuel Charter	Labor on culvert above Maumee	10 00
4	Lawrence Burkhart	Wood	4 00
5	C. H. Smith	Repairing harness	1 10
6	The St. Mary's Machine Co	Repairs for dredge No. 1	1 98
7	L. J. Mowiluis, Jr	Roofing " etc	33 55
8	S. E. Allmon	Keeping team, etc	22 55
9	J. R. Spencer	"	20 00
10	Wm. Casteel	"	20 00
11	C. L. Boulton	Livery	1 25
12	P. McGovern	"	10 00
13	Dick Barrington	"	16 00
14	C. S. Smith	Blacksmith work	4 50
15	Albert Smith	"	2 70
16	Chas. T. Reese, Jr	Hardware	2 08
17	Dunan & Koeper	"	2 65
18	Jas. McDonnall	"	7 25

ABSTRACT OF MONEY PAID—Continued.

No. of voucher.	To whom.	And for what paid.	Amount.
	February, 1898.		
19	Hollingsworth & Bamberger	Lumber	$33 47
20	H. W. Meacham	Expenses as superintendent	63 65
21	C. E. Perkins	" chief engineer	10 00
	Pay roll, officers	Salaries	603 48
	" No. 1	Labor	287 37
	Total for month		$1,169 50
	March, 1898.		
1	W. H. Doll	Office rent for collector	5 00
2	D. H. Hancock	Expenses as collector and office rent	17 86
3	H. W. Myers	" "	6 02
4	Wesley McDonald	Exp. measuring ice houses at Celina	3 50
5	R. H. Armstrong	Rubber boots	7 50
6	Lawrence Burkhart	Wood for collector's office	2 00
7	F. H. Stallkamp	Manila rope	2 32
8	W. H. Doll	White lead and oil used on dredge 1	11 18
9	E. F. Gross & Son	Pitch used on dredge No. 1	4 75
10	J. W. Woodward	10 lbs. nails, 1 paint br. on dredge 1	85
11	St. Mary's Machine Co	Repairs for dredge No. 1	1 36
12	Defiance "	" "	189 41
13	S. E. Allmon	Keeping team, etc	25 35
14	J. R. Spencer	"	20 00
15	Wm. Casteel	"	20 00
16	P. McGovern	Livery	9 00
17	C. L. Boulton	"	6 25
18	P. A. Ellis	"	4 50
19	Enis Young	"	5 00
20	J. N. Trumbull	Blacksmith work	1 75
21	Albert Smith	" "	3 55
22	H. E. Kuhlman	Hardware	10 55
23	A. F. Bishop	"	60
24	Dunan & Koeper	"	2 65
25	Samuel I. Borch	Lumber (logs for docking)	5 00
26	Joseph Barrington	"	67 49
27	H. W. Meacham	Expenses as sup't of repairs	63 65
28	Chas. E. Perkins	" chief engineer	10 00
	Pay roll, officers	Salaries	611 48
	" No. 1	Labor	200 25
	" No. 2	"	299 59
	Total for month		$1,618 41
	April, 1898.		
1	H. E. Fisher	Expenses as collector and office rent	43 78
2	H. W. Myers	" "	7 52
3	L. A. Eckert	Telephone messages	3 35
4	Dr. W. C. Holden	Veterinary services to horse	7 00
5	The Kind-Kuhlman Co	Cement	3 30

ABSTRACT OF MONEY PAID—Continued.

No. of voucher.	To whom.	And for what paid.	Amount.
	April, 1898—Concluded.		
6	W. H. Doll	Paint and oil	$14 10
7	The National Supply Co	Oakum and calking dredge No. 1	7 50
8	S. E Allmon	Keeping team, etc	22 25
9	J. R. Spencer	" "	21 70
10	Wm. Casteel	" "	21 00
11	P. A. Ellis	Livery	2 50
12	Dick Barrington	"	4 75
13	P. McGovern	"	9 50
14	Albert Smith	Blacksmith work	1 60
15	C. S. Smith	" "	3 50
16	Chas. Rodd	" "	6 50
17	G. W. Nulton	" "	1 12
18	G. E. Nungester	Hardware	9 60
19	Frank Adams	Lumber	7 55
20	Mason & Co	"	58 95
21	H. W. Meacham	Expenses as sup't of repair	63 75
22	Chas. E. Perkins	" chief engineer	10 00
	Pay roll, officers	Salaries	611 48
	" No. 1	Labor	418 95
	" No. 2	"	134 14
	Total for month		$1,495 39
	May, 1898.		
1	H. W. Myers	Expenses as collector	4 97
2	The M. I. Wilcox Co	Rope, oil, paint, etc	25 50
3	" "	Canvas covers, etc	2 52
4	H. J. Smith	Labor in repairing scow	1 00
5	S. E. Allmon	Keeping team, etc	22 85
6	J. R. Spencer	" "	30 35
7	Wm. Casteel	" "	20 00
8	P. McGovern	Livery and hauling	11 50
9	Enos Young	Livery	5 00
10	C. L. Bolton	"	4 50
11	Chas. Hurlbut	"	2 50
12	W. H. White	Blacksmith work	1 60
13	Jos. Hitz	" "	13 35
14	Dunan & Koeper	Hardware	4 66
15	A. F. Bishop	"	50
16	W. A. Kehnast	"	7 66
17	"	"	18 32
18	Joseph Barrington	Lumber	39 81
19	Karst & Tenzer	"	34 66
20	H. W. Meacham	Expenses as sup't of repairs	64 95
21	Wm. T. McLean	To Delphos col's office and return	8 85
22	Samuel Bachtell	To Minster and return	10 00
23	Chas. E. Perkins	Expenses as chief engineer	11 00
	Pay roll, officers	Salaries	611 48
	" No. 1	Labor	341 24
	" No. 2	"	233 77
	Total for month		$1,582 54

ABSTRACT OF MONEY PAID—Continued.

No. of voucher.	To whom.	And for what paid.	Amount.
	June, 1898.		
1	Jos. A. Claypool	Expenses as collector and office rent	$21 81
2	D. H. Hancock	" " "	18 40
3	"	Labor and team calking waste weir	8 00
4	Henry Phillips Co	Repairs on mowing machine	50
5	B. H. Brower	Repairing clock	75
6	Detwiler Milling Co	Sacks	1 00
7	Lasale & Koch	Linoleum for boat "A. B. Holcomb"	12 00
8	Central Union Telephone Co	Rent of tel. for superintendents office	13 50
9	J. W. Wright	Rope and plank	14 52
10	The National Supply Co	Rope & block pull's for dredge No. 1	30 19
11	St. Mary's Machine Co	Repairs for dredge No. 1	86 32
12	Chas. Charter	Mow'g w'ds along can'l & State prop.	30 00
13	James Kohn	" at Delphos	7 70
14	S. E. Allmon	Keeping team, etc	22 35
15	J. R. Spencer	" "	24 00
16	Wm. Casteel	"	20 00
17	Hurlbut Livery	Livery	10 50
18	Crescent Livery Co	"	6 00
19	P. McGovern	"	3 00
20	Jos. Hitz	Blacksmith work	8 20
21	I. E. Hipp	"	1 00
22	C. S. Smith	"	3 95
23	W. A. Kuhlman	Hardware	57 56
24	Dunan & Koeper	"	4 20
25	J. B. Tennison	Lumber	4 48
26	W. A. Reynolds	"	8 56
27	Hollingsworth & Bamberger	"	9 59
28	Wm. Peters	"	44 76
29	J. B. Merman	"	56 11
30	John Garmhausen	"	200 98
31	H. W. Meacham	Expenses as superintendent of rep.	63 50
32	C. E. Perkins	" chief engineer	8 00
	Pay roll, officers	Salaries	611 48
	" No. 1	Labor	515 40
	" No. 2	"	348 50
	Total for month		$2,271 81
	July, 1898.		
1	H. W. Myers	Expenses as collector	12 37
2	Guy Huffman	" & office rent	21 20
3	W. H. Doll	Oil and paint for dredge No. 1	13 25
4	Geo. H. Dicus	Sawdust used on State dam	2 50
5	S. S. Shull	1 barrel cement	1 10
6	R. R. Bortel	Pike pole	1 00
7	J. W. Woodward	Drayage	1 00
8	John Joyce	Hauling lumber	1 50
9	P. McGovern	" gravel, etc	23 50
10	S. E. Allmon	Keeping team, etc	20 35
11	J. R. Spencer	"	20 00
12	Wm. Casteel	"	20 00

ABSTRACT OF MONEY PAID—Concluded.

No. of voucher.	To whom.	And for what paid.	Amount.
	July, 1898—Concluded.		
13	C. L. Boulton	Livery	$4 00
14	Crescent Livery	"	4 00
15	Enos Young	"	7 50
16	C. S. Smith	Blacksmith work	2 50
17	P. McGovern	"	2 25
18	John J. Rexroth	"	13 75
19	John Komminsk	"	13 75
20	Myers Hardware Co	Hardware	1 13
21	Dunan & Koeper	"	18 45
22	Delphos Hardware Co	"	21 35
23	H. E. Kuhlman & Co	"	38 75
24	Hollingsworth & Bamberger	Lumber	54 21
25	J. B. Tennison	"	14 92
26	"	"	70 93
27	John Garmhausen	"	177 52
28	J. B. Mersman	"	543 89
29	H. W. Meacham	Expenses as superintendent	65 25
30	Samuel Bachtell	" ass't engineer	8 50
31	Chas. E. Perkins	" chief "	14 00
	Pay roll, officers	Salaries	611 48
	" No. 1	Labor	570 65
	" No. 2	"	292 43
	Total for month		$2,688 98

Tonnage Statistics.

TONNAGE STATISTICS.

STATEMENT

Of the tonnage of articles arrived and cleared at the port of Cincinnati, on the Miami and Erie canal, for the year ending November 15, 1898.

Articles.	Arrived.	Cleared.
Barrels—		
Ale and beer	.....	8,773¾
Flour	11,390	2,096
Oil	16	1,847
Lime and cement	.....	329
Vinegar	57	1,327
Salt	.....	40
Whisky	49,699	77
Bushels—		
Barley	1,040	.....
Corn	9,088	.....
Coal (mineral)	.....	49,765
Oats	.....	167
Malt	22,912	20,251
Rye	100	25
Wheat	240	150
Pounds—		
Acids	4,600	54,616
Baggage and furniture	30,000	35,350
Cotton	.....	1,425,275
Cotton batting	1,802,720	.....
Fire clay	.....	7,900
Hides and skins	260,400	2,600
Ice	2,880,000	539,850
Iron (pig or scrap)	110,500	.....
Iron (cast)	461,200	345,358
Iron (bar)	.....	749,817
Lard	18,300	121,551
Machinery	19,925	158,900
Merchandise	3,154,641	8,518,320
Mill feed	62,800	37,915
Pottersware	.....	13,805
Paper	15,068,406	170,787
Rags and paper stock	161,704	15,526,680
Starch	4,943,510	9,750
Sand	37,700,000	.....
Sugar	.....	293,508
Tallow	398,300	.....
Tobacco	60,000	10,608
Sundries	1,290,880	.....

STATEMENT, ETC.—Concluded.

Articles.	Arrived.	Cleared.
Number—		
Barrels (empty)	30,378	56,354
Brick	.....	38,500
Fire brick	250	12,414
Hoop poles	.....	32,825
Lath	.....	5,000
Posts	.....	6,182
Staves and heading	.....	7,950
Shingles	.....	18,000
Feet—		
Lumber	27,050	132,212
Cords—		
Wood	124	.....

W. A. GREGG, Collector.

STATEMENT

Of the tonnage of articles arrived and cleared at the port of Lockland, on the Miami and Erie canal, for the year ending November 15, 1898.

Articles.	Arrived.	Cleared.
Barrels—		
Ale and beer	8,271¾	.....
Vinegar	362	.....
Flour	2,103	9,631
Oil (linseed)	1,161½	1
Cement	1,350	.....
Tar	113	.....
Salt	22	.....
Whisky	622½	.....
Bushels—		
Barley	.....	1,040
Seed	.....	9,400
Potatoes	.....	25
Corn	8,953	15,833
Coal (mineral)	2,810	.....
Oats	167	5
Malt	.....	22,246
Rye	25	.....
Wheat	150	240
Pounds—		
Stoves	.....	51,902
Sewer pipe	18,250	.....
Fireworks	.....	416,104
Baggage and furniture	12,100	19,000
Wadding	1,500	2,442,200
Hay	20,500	.....
Cotton	1,507,285	30,000
Fire clay	7,900	.....
Soda ash	63,450	.....
Bottle wrappers	.....	183,220
Acid	137,620	13,400
Hides and skins	.....	32,000
Ice	999,150	1,500,000
Iron (pig or scrap)	.....	12,000
Rosin	45,680	.....
Iron (cast)	316,251	431,700
Iron (bar)	722,307	214,000
Lard	110,651	19,800
Tin cans	.....	960,100
Machinery	124,900	20,725
Merchandise	6,755,607	291,404
Straw	.....	16,000
Pottersware	12,995	.....
Paper	1,738,331	16,236,910
Meal and feed	36,700	48,700
Rags and paper stock	10,492,268	1,136,374
Starch	384,539	3,807,430
Sand	.....	8,000
Sugar	239,406	.....
Tallow	.....	531,000
Tobacco	408	.....
Sundries	10,955	.....

STATEMENT, ETC.—Concluded.

Articles.	Arrived.	Cleared.
Number—		
Barrels (empty) all kinds	38,000	36,338
Brick	60,000	2,000
Brooms	.....	12,200
Fire brick	10,764	.....
Hoop poles	32,035	.....
Lath	5,000	.....
Posts	2,995	.....
Staves and heading	14,900	.....
Shingles	18,000	.....
Feet—		
Lumber	188,632	11,300
Cords—		
Wood	.....	143

J. W. SULLIVAN, Collector.

STATEMENT

Of the tonnage of articles arrived and cleared at the port of Middletown, on the Miami and Erie canal, for the year ending November 15, 1898

Articles.	Arrived.	Cleared.
Barrels—		
Ale and beer	102	.....
Flour	.....	1,115
Oil (linseed)	39	.....
Vinegar	35	.....
Tar	.....	162
Bushels—		
Corn	.....	626
Pounds—		
Alum	.....	156,640
Baggage and furniture	8,500	6,100
Hay	.....	24,500
Hides and skins	.....	3,100
Iron (pig or scrap)	1,500	24,400
Machinery	21,600	23,050
Merchandise	946,549	159,200
Paper	29,800	4,754,100
Paper sacks	.....	627 020
Rags	4,506,677	900,335
Sugar	41,183	64,750
Feed and meal	.....	24,245
Number—		
Barrels (all kinds, empty)	.....	1,111
Brick	2,000	.....
Carboys (empty)	.....	515
Lath	.....	21,000
Posts	2,182	35
Shingles	.....	9,000
Feet—		
Lumber	16,399	49,671

F. H. Corson, Collector.

STATEMENT

Of the tonnage of articles arrived and cleared at the port of Dayton, on the Miami and Erie canal, for the year ending November 15, 1898.

Articles.	Arrived.	Cleared.
Barrels—		
Vinegar	920	61
Oil (linseed)	85	18
C. Wax		73
Potash		23
Whisky		4
Bushels—		
Corn		8,825
Rye		100
Pounds—		
M. dust		15,300
Baggage and furniture	15,800	14,900
Putty		23,280
Tar		13,900
Hides and skins	2,600	223,400
Iron (cast)		2,300
Lead	18,225	
Grease	11,300	
Soda ash	3,000	
Fireworks	7,950	
Merchandise	148,447	35,020
Paper stock	608,230	13,950
Rosin	16,700	
Paper	104,590	170,800
Powder, acid	72,450	1,200
Starch	1,080	
Sand		120,000
Sugar	3,300	
Tallow		338,300
Tobacco	10,200	60,000
Number—		
Barrels (empty)	15	1,688
Carboys		291
Staves and heading	16,100	
Feet—		
Lumber	89,200	
Cords—		
Splints		2
Wood	57	

LOGAN C. MILLER, Collector.

STATEMENT

Of the tonnage of articles arrived and cleared at the port of Piqua, on the Miami and Erie canal, for the year ending November 15, 1898.

Articles.	Arrived.	Cleared.
Pounds—		
Merchandise	.....	8,585
Sand	.....	62,000
Sundries (junk)	17,000	500
Number—		
Barrels (empty)	1,461	861
Brick	.....	36,000
Feet—		
Lumber	10,000	163,000
Perches—		
Stone	.....	3,074
Cords—		
Wood	166	91

LEWIS G. DAVIS, Collector.

STATEMENT

Of the tonnage of articles arrived and cleared at the port of St. Mary's, on the Miami and Erie canal, for the year ending November 15, 1898.

Articles.	Arrived.	Cleared.
Pounds—		
Iron (pipe)	.....	40,000
Straw	72,000	.....
Sundries	3,000	.....
Number—		
Brick	4,000	.....
Feet—		
Lumber	43,000	,000
Timber (spokes)	15,500	.....
Perches—		
Stone	497½	.....
Cords—		
Butts	200	195
Wood	20	.....

GUY HUFFMAN, Collector.

STATEMENT

Of the tonnage of articles arrived and cleared at the port of Delphos, on the Miami and Erie canal for the year ending November 15, 1898.

Articles.	Arrived.	Cleared.
Barrels—		
Flour		6
Bushels—		
Wheat		1,800
Pounds—		
Merchandise		6,000
Cabbage	14,000	
Number—		
Tile		1,200
Feet—		
Lumber	40,000	78,000
Timber (square)		21,500
Logs (round)		30,000
Cords—		
Buts	163	
Wood	523	
Bolts		214

JOSEPH. A. CLAYPOOL, Collector.

STATEMENT

Of the tonnage of articles arrived and cleared at the port of Defiance, on the Miami and Erie canal, for the year ending November 15, 1898.

Articles.	Arrived.	Cleared.
Barrels—		
Salt	.....	300
Bushels—		
Corn	.....	1,261
Oats	2,000	20,000
Wheat	.....	28,200
Pounds—		
Iron (pig or scrap)	214,643	921,463
Merchandise	943,241	341,210
Straw	80,000	.....
Number—		
Barrels (empty)	946	.....
Brick	.....	335,000
Tile	85,200	.....
Lath	.....	141,000
R. R. ties	4,994	.....
Shingles	11,000	60,000
Feet—		
Lumber	2,212,000	148,000
Timber (ship timber), cu. ft	.....	47,753
Perches—		
Stone	1,050	.....
Cords—		
Bolts	1,220	.....
Wood	4,050	2,480

H. W. Myers, Collector.

STATEMENT

Of the tonnage of articles arrived and cleared at the port of Napoleon, on the Miami and Erie canal, for the year ending November 15, 1898.

Articles.	Arrived.	Cleared.
Barrels—		
Flour	.....	367
Salt	20	.....
Bushels—		
Wheat	.....	11,500
Pounds—		
Iron (pig or scrap)	.....	10,000
Merchandise	8,600	6,750
Chop feed	.....	178,300
Sand	.....	304,805
Number—		
Barrels (empty oil)	.....	15
Brick	2,000	409,700
Lath	256,000	.....
Shingles	12,000	.....
Feet—		
Lumber	204,800	651,400
Timber	.....	7,500
Logs (cu. ft.)	240,557	32,557
Perches—		
Stone	.....	604
Cords—		
Wood	.....	292

D. H. Hancock, Collector.

STATEMENT

Of the tonnage of articles arrived and cleared at the port of Toledo, on the Miami and Erie canal, for the year ending November 15, 1898.

Articles.	Arrived.	Cleared.
Barrels—		
Flour	353	.....
Bushels—		
Wheat	47,894	.....
Pounds—		
Feed (tons)	127	.....
Merchandise	115,424	106,272
Number—		
Brick	35,200	7,200
Lath	.....	782,000
Feet—		
Lumber	493,400	412,770
Timber (cu. ft.)	66,650	.....
Perches—		
Stone	.....	9½
Cords—		
Wood	2,505	.....

CHAS. WITTICH, Collector.

STATEMENT

Of the tonnage of articles arrived and cleared at the port of Cleveland, on the Ohio canal, for the year ending November 15, 1898.

Articles.	Arrived.	Cleared.
Barrels—		
Acid carboys	.....	30
Soda	.....	2
Bushels—		
Coal (mineral)	26,355,600	.....
Pounds—		
Ice	5,927,800	.....
Powder	1,721,550	.....
Number—		
Brick	.....	14,000
Lath	.....	1,418,000
Fencing rolls	.....	35
Shingles	.....	155,000
Feet—		
Lumber	.....	6,261,296
Timber	11,860	.....
Perches—		
Stone (pounds)	1,026,600	.....
Cords—		
Wood	554	.....

CRYNERS LA RUE, Collector.

STATEMENT

Of the tonnage of articles arrived and cleared at the port of Akron, on the Ohio canal, for the year ending November 15, 1898.

Articles.	Arrived.	Cleared.
Barrels—		
Salt	.....	360
Bushels—		
Coal (mineral), pounds	32,026,400	12,461,500
Wheat	233	6,275
Pounds—		
Fire clay	596,000	150,000
Merchandise	61,950	.....
Sundries	.....	120,000
Number—		
Fire brick	.....	9,000
Lath	727,000	127,000
Shingles	84,000	.....
Feet—		
Lumber	3,296,886	217,166
Perches—		
Stone	186	.....
Cords—		
Wood	52½	191

J. H. Morrison, Collector.

STATEMENT

Of the tonnage of articles arrived and cleared at the port of Massillon, on the Ohio canal, for the year ending November 15, 1898.

Articles.	Arrived.	Cleared.
Barrels—		
Ale and beer	4,109	4,109
Oil (linseed)	44	44
Salt	319	319
Bushels—		
Coal (mineral), pounds	22,196,000	29,064,000
Rye	.....	150
Wheat	2,200	4,275
Pounds—		
Fire clay	3,128,000	3,582,000
Machinery	3,000	3,000
Merchandise	200,000	118,000
Powder	2,500	2,500
Straw	56,000	56,000
Sundries	100,000	60,000
Number—		
Barrels (empty)	.....	420
Brick	69,000	69,000
Lath	462,000	50,000
Shingles	75,000	.....
Feet—		
Lumber	2,270,188	700,188
Cords—		
Wood	370	370

DAVID ATWATER, Collector.

STATEMENT

Of the tonnage of articles arrived and cleared at the port of Canal Dover, on the Ohio canal, for the year ending November 15, 1898.

Articles.	Arrived.	Cleared.
Barrels—		
Flour		299
Lime		326
Salt		50
Bushels—		
Corn	841	434
Coal (mineral)		498,575
Bran		3,000
Wheat	61,702	
Pounds—		
Bones		2,750
Crockery		21,000
Machinery		2,000
Merchandise		7,000
Mill feed		12,900
Pumpkins		110,000
Number—		
Barrels (empty)	220	200
Lath	146,000	
Feet—		
Lumber	119,578	65,500
Timber		42,000
Cords—		
Wood		87

W. W. HARVEY, Collector.

STATEMENT

Of the tonnage of articles arrived and cleared at the port of Roscoe, on the Ohio canal, for the year ending November 15, 1898.

Articles.	Arrived.	Cleared.
Bushels—		
Wheat	1,025	1,025
Number—		
Lath	12,000	.....
Feet—		
Lumber	255,273	78,955

GEORGE SYKES, Collector.

STATEMENT

Of the tonnage of articles arrived and cleared at the port of Columbus, on the Ohio canal, for the year ending November 15, 1898.

Articles.	Arrived.	Cleared.
Bushels—		
Corn	3,000	
Pounds—		
Hay	516,000	
Straw	263,550	
Number—		
Hoop poles	8,363	
Posts	4,365	
Feet—		
Lumber	53,543	2,000
Cords—		
Bark	3	
Wood	271	

WM. PATTON, Collector.

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